

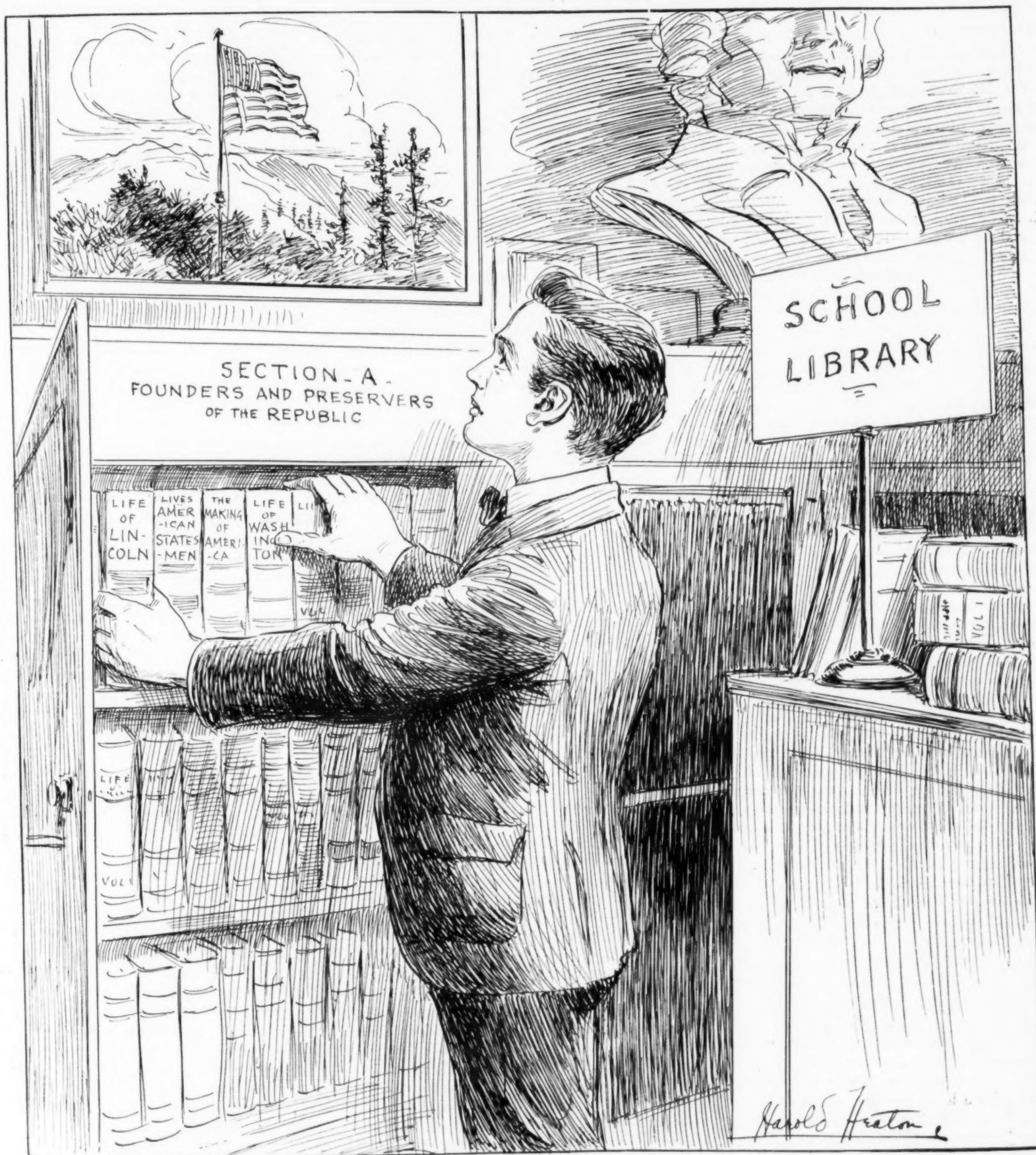
THE AMERICAN School Board Journal

Founded March, 1891, by WILLIAM GEORGE BRUCE

Volume LXVI, No. 2

FEBRUARY, 1923

Subscription, \$3.00 the Year



February: The Month of Washington and Lincoln



Letters From a Country Superintendent to his Daughter



II. - The Problem of Discipline

Dear Daughter:

I continue to be a leader in this district, but to be honest, I doubt if I am leading by more than a few yards tonight, for Bill Richmond and his crowd are circulating their annual petition again. It is a little early in the season for this paper to appear, as January is its regular month. A year ago the petition secured four signatures, but I think it will more than double that number this time, because it is written in a more attractive form, the wording being the work of a lawyer. I understand that the paper last year was a wordy document and that the author of it was modest enough to admit it was of faulty construction, which he claims explains why more citizens did not sign it.

But to be serious, I have not yet learned how many charges are to be brought against me, and I think nothing definite will be stated. I do, however, know what one of the charges is, namely, that by remaining here so long, I have proven myself a second rate man. No other superintendent ever stayed in this district longer than was necessary while waiting for a better job. So all have the reputation of being too good for these towns to hold. But in my case it is different. I know the needs of rural school work and instead of looking for a position in a larger town, I have tried to become a rural school specialist with the results that now a few people are saying that I am remaining here because I cannot leave. This is what I call the irony of fate.

The man who uses the rural superintendency as a stepping stone for city work gets the reputation of being a big man, regardless of the kind of work he did while in the rural field. But the superintendent who tries to make the work permanent and is willing to make financial and social sacrifices, gets the reputation of being a dead head. He is supposed to remain because he cannot find anything better and that no bigger district will have him. I do not mean to say that everyone thinks this of him, but in the long run his reputation as a rural worker is bigger the farther he is from home. There are some, however, who see what he is trying to do and help him. These are the people who make life worth living.

I hope you will not think I am downhearted tonight just because I hear of a small clique that is dissatisfied with my work. More recently, I have seen evidence that just as many people, and more substantial people are satisfied, so why should I let a few flies spoil the whole ointment. Of course one likes to be appreciated, but I have long since ceased to do things because I expected appreciation. I do things now for just two reasons, either because I want to do them, or because I am paid for doing them. If a person does a thing because he expects people will thank him or be appreciative, he is very apt to be disappointed. But if he

does a thing because he wants to do it, then the doing is its own reward, and as the poet sang, "Beauty is its own excuse for being." Usually, however, good acts are appreciated and then the reward for doing them is doubled.

There is one type of superintendent, and teacher too for that matter, that I detest more than any other. And that is the person who stirs up a town, loses his job, and then goes about the country acting like a hero because he claims he dared to live up to his convictions, even to the extent of losing his job. The truth is, he is not a hero. He is a failure. If he were right, with a little special ability, he could have brought his people to see the light, for it is a poor schoolman indeed, who cannot educate adults as well as children. If these superintendents were half as wise as they think they are courageous, they would know how to avoid a fight, rather than how to stir up one.

Many of our troubles are due to a lack of self-examination. If a teacher will say to herself, "The right person at this job, can handle this situation, and if I do not succeed it will show that I am not as capable as she", the problem usually vanishes. There is no problem in this world that cannot be solved and no task too great for man to complete, when the right person tackles it. So do not be discouraged with your work just because you are having some trouble with discipline. Just remember that the trouble is not with the children, but with yourself, and that you can change yourself much easier than the children.

I am not at all surprised that you are having trouble with discipline, and to tell the truth, I am not disappointed, for now is the time for your troubles with discipline to begin and to end. I usually find that teachers, whose recommendation from the normal schools are the highest, begin their first year with troubles of your kind. But, I also notice that the teachers with the right kind of ability and determination soon begin to find themselves, and instead of trying to drive their pupils, they begin to lead them. They begin to use more human methods and soon get the school running smoothly. New teachers are often too severe. They punish the boy who does something wrong by making him stay after school an hour every night for a week. And strange to say, instead of reforming the boy, this treatment deforms him, for he now gets sympathy from his parents and begins to think the teacher is a crank. But if the teacher will detain him for only a few minutes, the punishment strangely becomes very effective; for after all, the worse thing about being detained is the lonesomeness of having to walk home alone. The pupil who can run and catch up with his companions, has some object in keeping out of trouble for the rest of the day. Then there is another side of too severe punishments. They take more out of the teacher than the pupils, and that does not pay.

October and November are the two hardest months for new teachers, especially in the country. By this time the newness has worn off and the first report cards appear. Then trouble begins. Now is the time that a sensible school board is needed. Its members should realize that the new teacher has not yet had a fair trial and that if criticisms and adverse action can be held back for a few months, most teachers will weather the storm and finish the year in a satisfactory manner. But it takes men of courage and patience to stand up for a new teacher when most of the district is down on her, and it is often much easier to instruct the superintendent to help her find another school.

It is the duty of the superintendent to stand by the teacher during this period of stress and storm and to help her. He must help her see her own weaknesses and to understand the community. He must use judgment and when she does things that are not right, he should tell her so, for it is just as much his duty to be fair to his community as to the teacher, and the man who can separate the good from the bad is the man who will win in the long run. I am very sure that your superintendent Mr. Anderson, is the sort of a man who can do this very thing, and if he tells you that you are wrong, rest assured that you are wrong. He is telling the truth and is not merely trying to make a good impression with the parents of your pupils.

We are hoping the weather will continue mild so you will be able to come home for Christmas. Thanksgiving Day we missed you more than you would imagine. Your mother and I motored down to New Haven in the Ford and saw the Harvard and Yale football game. We left the children at Miss Boyle's house for the night. It was a good game, and your mother enjoyed a few hours away from the cares of home. My pullets began to lay the week before last and now I am getting six and seven eggs a day.

Do not let yourself work too hard, and remember that the best teachers are those who can do a day's work in a day and do not find it necessary to sit up half the night preparing for the morrow. The teacher who does that soon finds herself worrying about her work and is not able to do her best. In fact, when I learn that a teacher is so conscientious that she puts all her time on her work, I appreciate her loyalty, but secretly know that I am going to have trouble with her before the year is ended.

I have another pet test for discovering good teachers which I have never known to fail. It is this. If I can learn, and I usually ask, that a teacher gets up in the morning without being called, I mean, is an early riser, I watch her because I am sure she is going to be a success.

From your affectionate,

Daddy.

There a
philosophy
answer,
of instruc
2. How sha
eous? 3. V
supervise?
cesses and
shall be t
sion? A t
proposed f

The bo
on the sub
appearing
these com
cover the
well. If t
condition
spirit, it
ward, that
its reason
growth. I
in evidenc

Supervisi
What i
tion? W
first. On
its appoin

It is po
with num
but the d
itself mig
ning. Fo
on this
'Supervis
superinte
with the

Everyth
of instruc
intendent
included
superinte
'Supervis
group of
then emp
ranging
ministrat
study is
books is
textbooks

Thoug
it is a go
tinction.
themselv
the disti
dischargi
themselv
tinction,
need for
it would
speech.
making

We ne
and spac
utteranc
we mean
of proces
using th
the appl
rected to
ation of
cussion
designat
lieved t
gain in
cedure.

Supervision of Instruction: Why?

Charles A. Wagner, Superintendent of Schools, Chester, Pa.

There are five great questions which the philosophy of supervision of instruction must answer, as follows: 1. Why shall supervision of instruction be instituted and maintained? 2. How shall it be exercised and made advantageous? 3. Who shall be supervised and who shall supervise? 4. What shall constitute the processes and procedures of supervision? 5. What shall be the measurable outcomes of supervision? A tentative reply to the 'Why?' query is proposed for this paper.

The books on supervision and the articles on the subject which have been and which are appearing, discuss cross sections of several of these comprehensive phases of the subject, and cover the aspects of phases chosen commendably well. If the art of supervision is in a healthy condition and possesses the truly adventurous spirit, it will venture to take a next step upward, that is, it will propose the formulation of its reason for being and for continuance and growth. It will propose answers to the 'Why?' in evidence of faith in itself.

Supervision and Administration Distinguished.

What is the work of Supervision of Instruction? We must give an answer to that question first. Only then can we show Supervision doing its appointed work.

It is possible to conceive supervision charged with numerous and various duties, certainly, but the delimitation of the term "Supervision" itself might be regarded an appropriate beginning. For convenience in writing and speaking on this subject it would be an advantage if by 'Supervision' we designated that part of a school superintendent's duties which concerns itself with the direction and oversight of instruction.

Everything that is concerned with betterment of instruction as a responsibility of the superintendent or supervisor may quite suitably be included under the one general duty of the superintendent's office which we denominate 'Supervision'. To distinguish the other general group of superintendent's activities we may then employ the term "Administration". Arranging the budget of expenditures is an administrative duty, but arranging the course of study is a supervisory duty; purchasing textbooks is an administrative job but selecting textbooks for use is a supervisory job.

Though not everywhere used or recognized, it is a good time to begin to recognize this distinction. So long as school superintendents had themselves not developed the consciousness of the distinctly different duties which they were discharging and more especially so long as they themselves did not feel the need for this distinction, so long there probably was no actual need for the distinction and little chance that it would be accepted and used in thought and speech. Development is now under way and is making rapid strides.

We need the differentiation so as to save time and space, to attain precision and directness of utterance by using the word 'supervision' when we mean activity directed to the improvement of processes and activities of instruction, and by using the word "Administration" when we mean the application or exercise of any activity directed to the promotion of management or operation of a school system. Throughout this discussion these two words will be used with the designation here ascribed to them. It is believed that economy of space and time and gain in force and clearness will justify the procedure.

The caution should here be given that "Supervision" alone is to be discussed in these chapters. "Administration" had the field of books entirely to itself for all the years since the superintendency arose. In no book on supervision written before Pickard did the application of supervision to teaching and instruction get a total of ten pages of consideration. Apparently the duties of administration called for the superintendency and occupied its time."

"School Supervision" by J. L. Pickard, LL. D, copyrighted in 1890 devotes chapters LX and X to activities which are real supervision. These two chapters cover pages 69 to 110 inclusive. The entire discussion occupies 148 numbered pages and allots to supervision just 41 pages or 28 per cent. Recently books confining themselves exclusively to "Supervision" are beginning to appear. No phase of the superintendent's work or responsibilities affords so good an opportunity in this decennium as does supervision for original and constructive. It is the desire and the hope that these chapters may convey suggestions and disclose indications of some of the real problems.

The prime question may now be reasked: What is the work of supervision? Viewed from the aspect of practice there is no general answer, certainly no universal answer. In most cases the answer will be best stated in the terms of the superintendent who says, "I know I do not give time enough to supervision, but I give all I can and I know that is just what most of my friends are doing."

The importance of the function has not been clearly enough recognized to secure for it the standing and the time to permit real supervision, or to put it the other way, much of the larger proportion of supervision is ineffectively done and the supervisors are themselves painfully aware of the fact and will admit it without any show of denial.

Here is a suitable subject for investigation by a great university postgraduate department of education: "What do superintendents think of the quality of the supervision which they can give under conditions?" Of course there are school systems where the supervision is excellent and is truly vitalizing the instruction and the learning. These are conspicuous exceptions. Will not the question propounded a few lines ago evoke a laugh in most cases, and elicit the question, "Why waste time to investigate that matter? The men will practically all admit that their supervision is mechanical, superficial, hasty, disjointed, irregular and even spasmodic, and will justify their procedure by the claim that their administrative duties consume too much of their time to permit serious, consecutive, intensive and constructive supervision.

Viewed from the angle of some of the possibilities of supervision, a fourfold aspect of the work of supervision may be presented. These four aspects may be arranged alliteratively by regarding them as commendation, correction, construction, and contribution.

Seeing the Commendable.

1. Commendation is first in the list by importance and should also be first in emergence in actual supervisory work. To see the commendable, then to commend it as it deserves, opens the way to the sympathy of the teacher or the learner, and arouses a higher pitch of effort. To fail to observe the commendable shows either ignorance of the good and excellent, or lack of power of discernment. Either or both stamp the supervisor as poorly qualified.

To fail to commend if commendation has been observed and perceived, stamps the supervisor as mean and niggardly, hence totally unfitted for the large responsibility of calling forth the teacher's best effort. When the teacher's ear and mind have been opened by the fair and generous recognition of what is praiseworthy, there exists the ready disposition to hear and heed the suggestions and directions which proceed from the same source. Commendation has approved the excellent and by so doing has paved the way for the next activity, namely, Correction.

Correction an Obligation.

2. Correction, or the second large obligation of supervision, must set up tables or lists of teaching merits. These lists need explanation and definition in terms of teaching practice and procedure to the teaching corps which is to be supervised for the attainment of these merits or excellences. The needed explanation and illustration of the listed terms and procedures may and should be the earliest work of teachers' meetings and conferences both when a supervisory system is first established or when a new supervisory regime is being established.

No preliminary arrangement is quite so important and so necessary as this preliminary of establishing standards whose terms mean the same things and carry the same values for both teachers and supervisors. The very first remedial effort that can follow from the supervisory visit is the correction of faults which make the good work better. Necessarily constructive in character and value, correction may nevertheless be regarded as that second phase of influence of supervision which remedies the remediable, and which in thought and procedure is distinguishable from the third activity of supervision, namely, construction.

Construction in Supervision.

3. Construction requires that there be constant use and application of accepted practices and procedures to new topics, new matter, new school activities. All good teachers hit upon new applications, all good teachers are constantly striving to vary method and procedure in search of larger and wider application of present procedures, so that the teaching and the learning labor and activity shall reduce themselves to wider universality and to greater simplicity.

That young teacher was properly proud and happy who discovered that the conversion of inches to feet in denominate addition would enable her fourth grade children to comprehend 'reduction ascending' (more commonly known as 'carrying') in addition more quickly, more clearly and more rationally than the play with bundles of splints. For that teacher the discovery and use of the similarity was a piece of real constructive work. Teaching finds instances. To be ever on the search for these newer applications, to be originating them or to be discovering them in the work of others, is surely one of the variations in the work of supervision which is needed to keep teaching and supervision fresh and varied and always in process of completer adaptation. If for no other reason, then surely for this last reason, supervision must be in a process of constant reconstruction.

Professional Contribution.

4. Contribution. As teacher and supervisor have inherited and appropriated what another generation has wrought out and established as sound procedure, and as their total stock in trade is pretty much an inheritance professionally, therefore they owe to somebody a large

measure of gratitude and a substantial return of the same kind of goods. Return to the benefactors is impossible, for they have done their work and passed on. To whom, therefore, can the obligation be repaid? How shall the equivalence of return be accomplished?

There is but one way manifest. Make the return to your contemporaries or to your successors. By as much as the teacher and supervisor derive benefit from the contributions of the past, by that much they owe a return benefit. Use of conferred advantages imposes obligation to make equivalent contributions. Hence, whatever grows out of supervision into method, device, procedure, type, model, system, or other unit of change and improvement, must be fashioned into a communicable or a demonstrated form, whether as books or articles or speeches or discussion and must be given to the professional world of education.

No plea of modesty or lack of confidence can for a moment serve as an excuse for the shy and the diffident. If none produced and shared, most of us would be poor indeed. Sharing no less than producing is the professional obligation. The demonstration of a piece of work commended by a supervisor before your own teaching corps upon request, is the highest professional obligation of any or of every teacher. What a difference it will make to superintendents and supervisors when this professional obligation shall be universally taught and practiced in the spirit of reciprocity.

How easy it will become to conduct teachers' meetings and conferences that truly set up conditions under which the meeting shall confer something, meetings in which some teacher who has accomplished tells the other teachers of the corps what has been done and how it was accomplished. When that time comes, the contributions of teachers will be more important and more valuable to a corps than any others because they carry with them the self-searching, self-impelling query, "Since another teacher has done it, why may not I too do it?"

Supervision of instruction, like every school procedure, admits of presentation as a mechanical process which may have many forms of equal excellence. A variety of those forms it is the purpose of this text to set forth as succinctly as possible. It is cheerfully admitted, however, that other equally good forms may be prepared and employed by other authors whose experience and training fit them admirably to speak with knowledge and authority on the subject.

In a field where all workers are of necessity all learners and largely experimenters, as in the field of definitely constructive supervision of instruction, no one may assume comprehensiveness of knowledge or exhaustiveness of information. The best that any worker may do is to live up generously and completely to the fourth obligation of supervision, namely, to the obligation to contribute promptly and ungrudgingly.

Spirit or Machine.

Mechanical presentation of processes of supervision must not allure the writer nor delude the reader into forgetfulness of the fact that supervision is a spiritual process. It can proceed only from spirit to spirit. It can not proceed from spirit to a machine and from that machine to another spirit. The human soul finding expression in speech is the supervisor, and that speech finding comprehension and arousing action in another corresponding human soul completes the process.

In the field of motivation of human endeavor there is no higher or nobler cycle than the cycle which embraces and consists of the duties of the supervisor directing the teacher. This is necessarily true because the work of the teacher reaches so many human beings and affects their

thinking and action for the entire span of a human life. Therefore the statement should be made at the start of this discussion that although the discussions of this paper are almost exclusively about mechanics of supervision, the author is fully aware and entirely of the opinion that before there is any need for mechanics there must be power to set the machine in motion and to maintain the motion.

Supervision as power can and must be conceived as preceding supervision as mechanics or as a form of procedure. Supervision as inspiration is a variant form of expression. This means that the supervisor has faith in the child, has faith that the supervisor's activities and ministrations will enable the child to attain his human destiny and his immortal possibilities, and that the supervisor can imbue teachers with a like faith in themselves and in their endeavors for the development of children.

Faith is truly 'the substance of things hoped for, the evidence of things not seen'. Mechanics of teaching and supervision supply means by which teacher and supervisor test for some measure of result, of course, but just because the instruction of the child comes to fruition in the conduct of the adult, therefore it must always remain true that the work of the teacher is a work done in the faith that if a child be instructed in the way that he should go when he is old he will not depart from it, as Scripture tells us, and also in the greater faith that the earnest teacher's faithful endeavors will be sure to contribute to the permanent values in character of the instructed child.

This particular thought needs very particular emphasis right now, when the claims made for Tests and for Standard Testing are entirely obscuring the values of instruction and teaching and supervision which can not be found nor measured by Tests except the tests which life imposes, which the teacher may never see and whose results may never be tabulated for his inspection. When Jane Taylor's vision in 'The Philosopher's Scales' comes true we shall be able to dispense with Tests and yet to appraise quite fairly the results of the teacher's efforts:

"What were they?" you ask. You shall presently see.

These scales were not made to weigh sugar and tea.

Oh no, for such properties wondrous had they, That qualities, feelings, and thoughts they could weigh.

Together with articles small or immense, From mountains or planets to atoms of sense."

When even atoms of sense shall be discoverable in the schooled child, the supervisor and the teacher and even the college professor may hope to enter into a fair recognition of the worth of his work and a more just reward both material and spiritual.

Thus it must be understood that while supervision is analyzed as consisting of the processes

of commendation, correction, construction, and contribution. These processes and their discussion will constantly assume that the presentation of the mechanical processes of these lines assumes the existence of an antecedent mental and spiritual force which needed just such a mechanics to make itself manifest and apprehensible and communicable.

HOW SHALL HIGH SCHOOL GIRLS DRESS?

Mrs. E. S. Berger, Member Board of Education, Smith Center, Kans.

The question of dress for high school girls is a perplexing one for mothers, teachers and the girl students. It has, no doubt, concerned school authorities at times in various sections of the country.

We, of Smith Center, believe to have found an acceptable solution in the adoption of a simple and neat dress, which is uniformly worn by our high school girls.

The acceptance of the plan found its origin a few years ago in the appearance of immodest waist and skirts among the high school girls. The dress question, too, was accentuated by the fact that some of the parents could afford to provide their girls with the kind of dresses their girls desired, with the result that some of them came to school gowned as if they were going to an evening party.

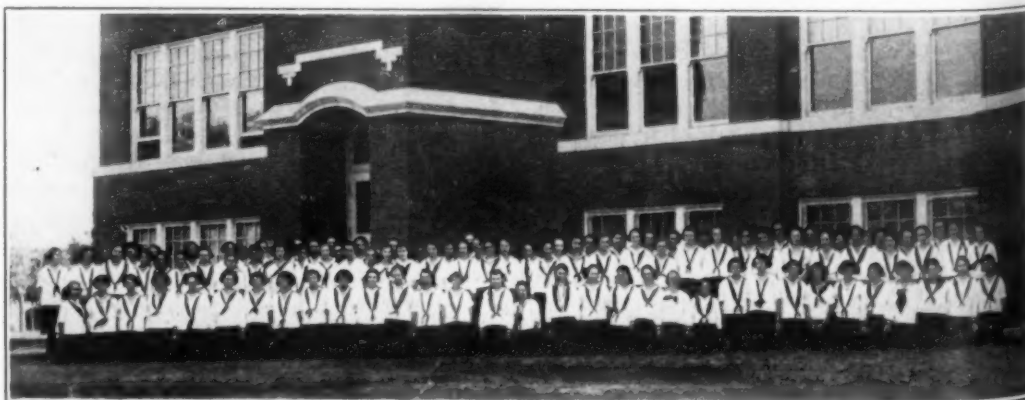
This not only created a strife in school to see who could have the prettiest dress; but it was somewhat trying for the girl of modest means and worse still for the poor girl. One of the senior girls of this last type begged her mother to let her quit school and work in a hotel that she too might have some pretty clothes. She felt she could not go to her class and sit by the side of some girl with a pretty silk dress while she had to wear such cheap material.

Of course, we older people will say, go on get your education never mind your clothes, but youth is not so easily satisfied. Knowing this and feeling that something should be done to change the situation, the school board called a meeting of the mothers who were interested in the high school girls and informed them that something should be done about the dress question. Several of the fathers came too.

The feasibility of adopting a uniform dress was explained, as well as we were able to do and opinions were asked for. Some of the mothers thought the girls would not like the uniform. Some thought it would be expensive while others said it would destroy the girl's individuality. Finally a member of the school board was appointed to choose a uniform. The a vote was taken, and the project was adopted.

One of the local merchants helped out by displaying the uniform in his show window and one day when there was an unusually large crowd in town, two of the girls appeared in live models dressed in the uniform that had been chosen. The battle was won.

(Concluded on Page 136)



HIGH SCHOOL GIRLS IN UNIFORM DRESS, SMITH CENTER, KANS.

Simplified School Accounting-I

Arthur J. Peel, C. P. A.

"Democracies are doomed to inefficiency and waste in public finance, unless democratic constituencies can be aroused and schooled in the business details of government. Arousing them in such matters is difficult; schooling them is even more difficult."

This statement was made recently by the president of a southern university, and it is undoubtedly true of county and town government in a large number of states. But if it is equally true of county and town school boards and communities, we are faced with this paradoxical situation; the institution which is the greatest contributory factor to the enlightenment of democratic constituencies is itself found wanting in efficient business administration and government. Or, to put it more plainly; if the public body which is responsible for the teaching of elementary bookkeeping and basic accounting principles to high school students, is found to be conducting its own business in a manner which would bring the censure of the instructor on a class pupil, to what conclusion are we forced? Are we not justified in offering such a body this ancient piece of advice—"Physician, heal thyself?"

The endorsement of a policy, by the people of a country, a district or a state, does not necessarily carry with it the endorsement of the administration; and even when the results of the policy are what they were intended and expected to be, there still remains the question as to whether the administrative work has been carried on in a businesslike and economical manner. This applies particularly to school administration.

It may be the desire of the electorate of a county, a district or a city to educate as many as possible of the children and youth of the community, and to educate each one as well as possible, and it may be that this noble purpose is actually achieved; but if in one school district the cost of educating a pupil is \$29.56 while in another district it is \$26.38 for the same quality of work as is found in the first district, the question arises as to why the cost of educating children in one district is higher than in another when the conditions are similar? The general educational policy is the same, and in both districts the educational ideal has been attained, but there is a serious difference in the administration of the two districts.

Uniform Accounting Needed.

It is for this reason that in every state there should be established uniform accounting methods and standardized practice for school districts. This is positively essential to good school administration. There can be no real intelligent study of educational costs without comparisons, and there can not be comparisons of any value without standardization of records which constitute the basis of such comparisons; this is a self-evident proposition.

It is well-known that in every state in the Union the public conscience is awakening to the importance of increasing and bettering the educational facilities of the state, and the cost of building, maintaining and operating schools, instruction of pupils and other educational activities, is increasing by many millions of dollars every year. For this reason proper accounting methods is a fundamental matter. No business, private, corporate, or public, rises above the level of its bookkeeping; this may be disputed but it is a fact nevertheless. In its relation to school work, the instruction may be all that could be desired regardless of any accounting system, or lack of one, but the business

of instructing will be efficient or inefficient according to the degree of efficiency of the accounting methods in operation in the office of the superintendent.

The plea is often made in defence of the accounting methods in force in so many school board offices, that the teaching profession, being academic by type and training, can not be expected to reach high standards of efficiency in such matters as bookkeeping. Undoubtedly this is true to an extent, due to the lack of sufficient practice to balance the preponderance of theory. A few years ago one of the best known business colleges in the country employed a firm of accountants and engineers to install a modern system of accounts, and reorganize their filing system. It sometimes happens that young men and women who have taught mathematics in school, including the basic principles of accountancy and elementary bookkeeping, find themselves hopelessly at sea when they take business positions and have to deal with everyday accounting problems. The writer knows this to be a fact for he had a large staff of clerks under his control during the war, among whom were several ex-teachers, and in no instance did any of them shine as accountants. This is not necessarily to the discredit of the teacher, it is simply an illustration of the fact that in addition to theoretical knowledge and experience in academic problems, there must be the "business" type of mind. The best accounting system ever devised, depends in the final analysis on the human element, if it is to function properly.

The writer has gone to some pains to emphasize this point, as from considerable experience in institutional and government work he has seen so clearly the need for properly trained officials in order to get the best results from any kind of an accounting system. It is not to be implied from this that the superintendent of schools must necessarily be a business man, or woman, but it is certainly very desirable that the superintendent should have in his office a clerk who has had accounting training and experience, preferably in the business world.

New Conception of Accounts.

Mathematics is the only absolute human science, and accountancy, being an application of mathematical principles to business, naturally partakes of this quality. The methods by which these principles may be applied to business activities are many, ranging from the single-entry "cash book" form of accounting, to the intricate and elaborate double-entry systems, highly classified, with controls and sub-controls, Hollerith punched cards and numerous other modern schemes for obtaining speedily and accurately, a mass of information. But between

COST OF EDUCATION.

The cost of public education in the nation has grown much more rapidly than the population, indicating the people's faith in it. Within a period of fifty years, ending in 1920, the cost of elementary and secondary education in the United States advanced from \$75,000,000 to \$750,000,000, an increase of nearly 1,000 per cent. During this time the population increased only threefold. Within a period of twenty-five years, ending in 1920, the cost of higher education in the United States increased from \$17,500,000 to \$140,000,000. Within a period of twenty years, ending in 1920, the cost of operating professional schools for the training of teachers advanced from \$4,000,000 to \$25,000,000.—B. J. Burris, State Superintendent, Indiana.

these extremes may be found systems which are thoroughly adequate, yet so simple as that they present no insuperable difficulties to intelligent men and women, even though without special training in accountancy.

The old idea that the purpose of accounting was merely to record receipts and disbursements in such a manner as to show balances of funds on hand, or deficits, is rapidly giving way to the higher conception which recognizes that accounts should be the sensitive barometer which shows, not only the condition of finances but the sources and classification of revenue, accrued and unaccrued; the liabilities incurred in addition to the disbursements made; the classification of expenditures by function, character, and object; the combining and accumulating of expense items in such a manner as to show the actual costs of definite and specific operations. In addition to this, modern accounts are so arranged and classified that the accounts which enter into the balance sheet can be segregated as a set; another set furnish all the information necessary for the income and operating statement; while another establishes the fixed charges. The test of a good accounting system is whether it combines efficiency with simplicity. If we can produce a system of school accounting which measures up to this standard we have achieved that which ought to be of the utmost value to school boards, the district, the town, the county, the state and the nation. The writer has before him a number of blanks furnished by the United States Bureau of Education in Washington. These forms are issued to school boards and committees for the purpose of obtaining certain vital information relative to school administration, which can be accumulated and embodied in national statistics for the guidance and information of educational authorities throughout the country. It is noted that the nature of much of the information asked is such that it would be a physical impossibility for many school boards and committees to furnish this without an adequate system of accounting.

Subjects to be Discussed.

In this series of articles on the subject of school accounting, it is our purpose to explain in language devoid of technical terminology, the features and "modus operandi" of a system of accounting for school boards and committees, which, while established on definite principles and standardized methods, is sufficiently elastic for adaptation in any locality as well as to meet all conditions found in public school government.

The following subjects will be thoroughly dealt with:

1. A general survey of the accounts necessary to meet the requirements of the modern public school system.
2. Original records, and books of original entry. Under this head we will deal with bills and other documents establishing a charge against the administration; the proper method of recording all such original documents. Check and Receipt registers, etc.
3. School revenues; classification by source, and other information required relative to income.
4. School expenditures; classification by function, character, and object, with illustrations of each class.
5. Ledger accounts; their purpose and value.

6. Cost accounts; the story they tell and methods of operating.

7. School budgets and appropriations; simple but effective methods of positive control of expenditure.

8. Monthly and annual reports; what information should be summarized in report form; useless and expensive forms of reporting.

9. Graphic charts and graphs; the presentation of school operations in a manner which will arrest the attention of every intelligent taxpayer.

In briefly surveying the accounts which are necessary to meet the requirements of the modern public school as established in the United States and in Canada, it may be well to ascertain what it is that we want to know in connection with public school operations.

Some Fundamental Questions.

The first question that occurs to one, is—"What does our school system cost the taxpayer?" If this question is interpreted literally it presents no difficulty; it costs the taxpayer no more, or less, than the amount of the school taxes. But if we restate the question in such a way as to express what most people really mean when they make this inquiry, we would ask—"What does it cost to maintain and operate the school buildings and other educational centers, and to instruct the children of the community?" We now have a very definite inquiry and there are whole states in this progressive country of ours in which not a single school superintendent could furnish accurate and reliable information in reply to the question stated. There are many more in which the information could not be obtained easily and speedily. And there are a few where it could be furnished at three hours' notice.

In many school districts, counties and towns, the total disbursements for school purposes is taken as the cost of operating the schools in the district. Needless to say this is entirely wrong and seriously misleads the public. There is no

necessity to stress this point, but it must be pointed out that *disbursements* are *liabilities liquidated*, *expenditures* are *liabilities incurred* and it is expenditures which tell the story, not disbursements. Herein lies the evil of the "cash-book" system of accounts which takes cognizance only of disbursements and not of expenditures. The writer recently saw a statement which emanated from a county school committee, in which the expenditures were stated at \$45,000 and the receipts at \$48,000, making it appear that the board had a surplus of \$3,000 available for the following year's work. It was proved on further investigation however, that the accrued liabilities amounted to \$4,750, over \$2,500 of which was accrued interest on bonds which had not been paid at the time of the closing of the accounts for the year. This is an extreme illustration of bad bookkeeping, but unfortunately such methods are not yet extinct in some states.

Facts Which Must be Available.

In view of the great importance of school government and the ever-increasing expense for this purpose, the following information should be available in the office of every school superintendent:

1. The available revenue for school purposes.
2. The total amount actually received from general taxation, special taxation, dog tax, court fines and penalties, donations, and any other regular and special sources, *to date*.
3. The expenditures incurred by the administration, *to date*.
4. The total payments to date, and the amount of "encumbrances" against appropriations.
5. The expenditure on:
 - Administration.
 - Maintenance of buildings.
 - Operating of school buildings.
 - Instruction.
 - Welfare (Health inspection, etc. Public

lie playgrounds).
Auxiliary agencies (School libraries etc.).

Fixed charges.

Debt service.

Capital outlay.

6. The cost of educating a child in each of the schools of the district, county, or town.

7. The total, and per capita, cost, of instruction in English, mathematics, Latin, history, civics, science, and so forth. Also comparative costs for kindergarten, graded, and high schools.

The accounts which it will be necessary to set up to reflect this information, are as follows:

Appropriation accounts.

Revenue accounts.

Operating accounts:

Maintenance.

Operations.

Instruction.

Asset accounts.

Liability accounts.

Fixed charges.

Cost accounts.

With the exception of the cost accounts, these are all contained in the ledger; the cost accounts may be in the form of monthly statements compiled from the original data.

It may appear that a set of accounts such as the above must of necessity be very complicated—so does the first problem of Euclid, to the boy who has never seen the book before. As a matter of fact, the accounts and the system which we are to discuss are by no means beyond the average school superintendent, or any intelligent clerk in his office. Of course they could be made very complicated, but it is our purpose to *simplify* school accounting, and we hope to be able to demonstrate that this is really practicable, provided due attention is given to the instructions relative to the keeping of fundamental and basic records.

Note. The second paper in this series will appear in the March issue of the JOURNAL.

School Building Programming in a Southern City

N. L. Engelhardt, Professor of Education, Teachers College, Columbia University, New York City.

Southern cities are faced with a problem in the development of their school building program to which no analogy can be found in cities north of the Mason and Dixon line. In the modernization of the school plant in southern communities, the task must be considered not in the light of the needs of one population group, but in terms of the two racial groups involved.

The solution would be relatively simple if a city were divided according to a defined program, with the white people living in sections solely developed by them and with the colored people occupying homes, located in community centers, designed for their race and geographically defined. The residential growths and racial housing trends in American cities are, however, in the majority of cases, matters of chance and do not follow well defined principles outlined and accepted in the interests of all citizens. Growth in the total population of a city has most frequently meant gradual shiftings and re-location of racial groups, with the result that only the most careful and consistent policy of school building planning will produce the desired economy in school housing and will keep at a minimum the number of school buildings which will be needed.

The city of Atlanta, Ga., presents a good illustration of a city which has grown with great rapidity and has extended its residential boundaries in such a manner as to create much over-

lapping among the school districts of the two racial groups. This, with other factors, has resulted in multiplying school houses and in creating other unfortunate school housing conditions, the remedy for which Atlanta has recently sought to apply by setting aside an initial sum of \$4,000,000 for the rehabilitation of the school plants for both white and colored children.

The extremely rapid growth of urban Atlanta, as compared with that of the entire state of Georgia, is evidenced in Chart 1. The growth for Atlanta for each of the last three United States census periods is 37 per cent, 72 per cent and 30 per cent over each preceding census as compared with 21 per cent, 18 per cent and 11 per cent respectively for the state of Georgia for these same years, 1900, 1910 and 1920. The colored population of the city has not grown as rapidly as the white population as, in 1890, the whites constituted 57 per cent of the total, while in 1920 they formed 66 2/3 per cent of the total of 201,089, as given in the United States census. The percentage distribution of racial groups by wards is given in Chart 2. The inference is that each ward presents the two-fold problem of school housing.

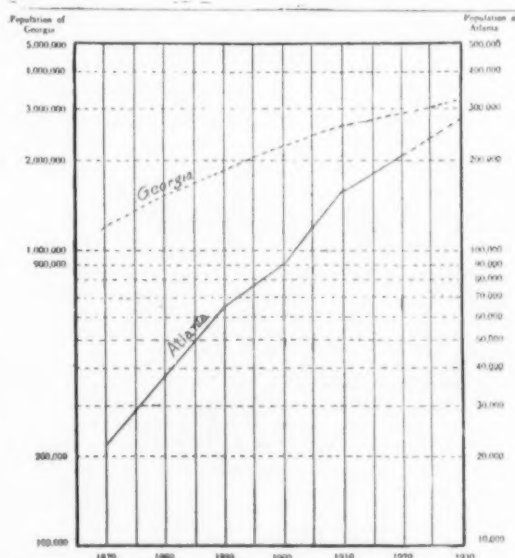


CHART 1. COMPARISON OF TRENDS OF POPULATION IN GEORGIA AND ATLANTA.

Chart 3 indicates with greater exactitude the basic factors which must be considered in providing additions to the school plants for both racial groups. In this map of the city of Atlanta is shown the residential distribution of white and colored elementary school children as of January, 1922. The small sections of this map are the house-count sections according to which the principals of each school recorded the residential distribution of their children. In this case, the house-count section is that geographical subdivision of the city utilized by the Southern Telephone & Telegraph Company in making their own "house-count" census of the city. The relationship between the black and white areas of each house-count section represents the rate between the number of colored elementary children in each section and the total number of elementary children in that section. Because of the fact that the residences of children were recorded in terms of house-count sections rather than according to the exact place in the house-count section where the children live, the black areas on the map do not indicate the exact position of the homes of the colored children, but represent the percentage of each particular house-count section which the colored children are of the total number of elementary children in that section.

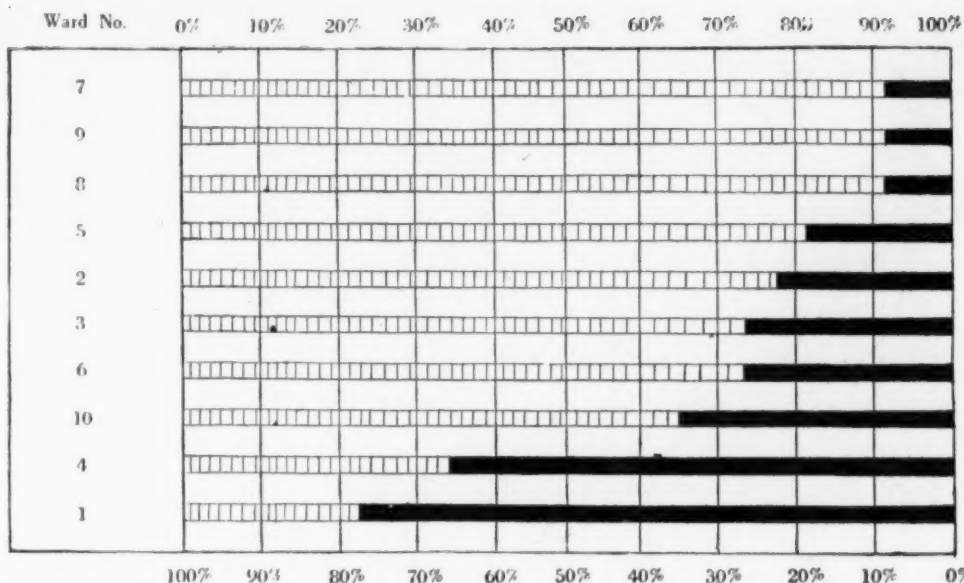


CHART 2. POPULATION OF ATLANTA—1920 CENSUS. PER CENT WHITE AND PER CENT COLORED, BY WARDS.

In reading the percentages for white population, use the scale at the top, and the scale at the bottom for the colored population. The light section represents the white population, the black section the colored population.

In charts 4 and 5, the complexities of the elementary school housing problem may be seen even more clearly as here the children of grades one to five inclusive are distributed according to their residences. Each dot on these maps represents ten children. The maps should be com-

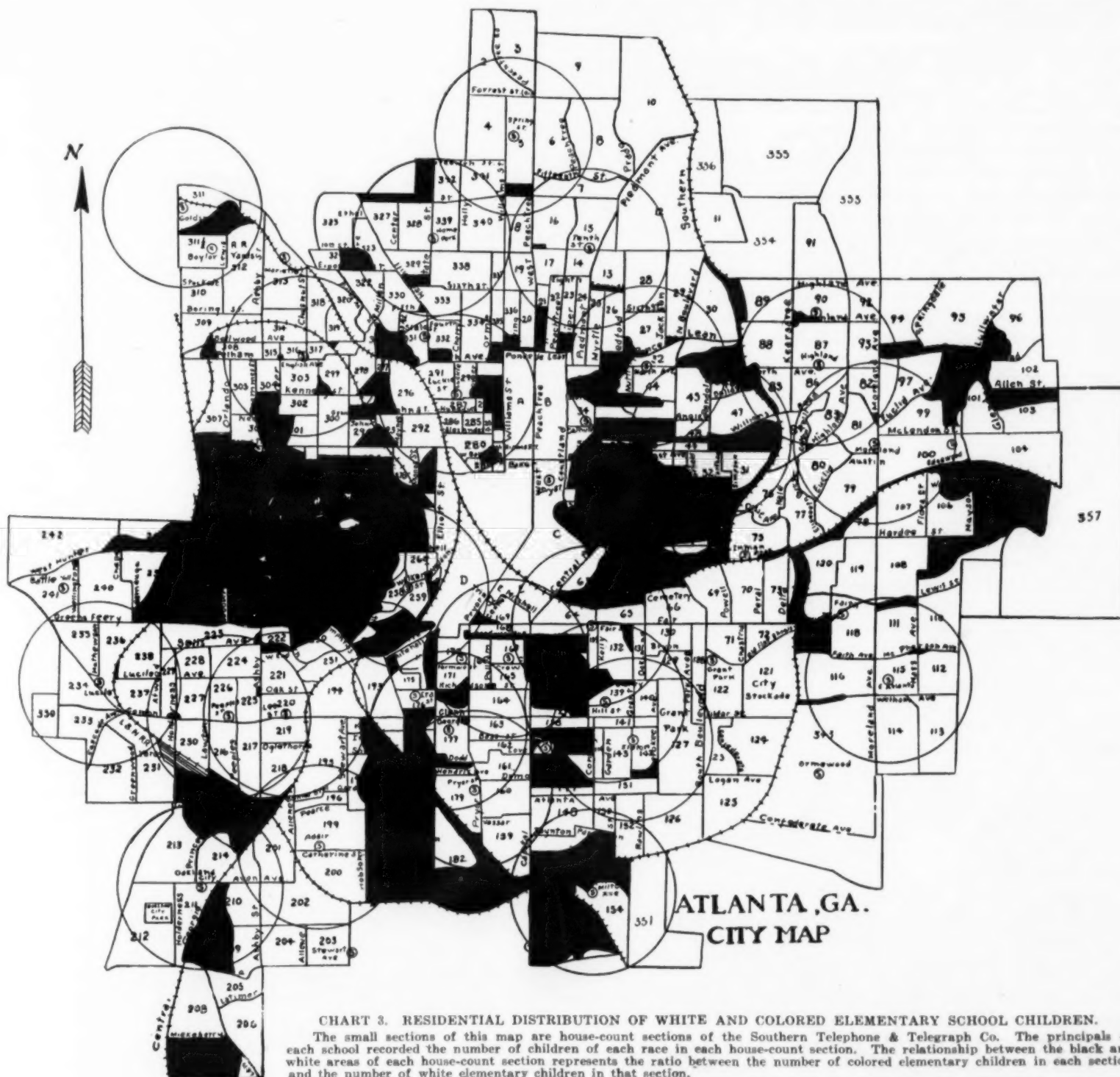


CHART 3. RESIDENTIAL DISTRIBUTION OF WHITE AND COLORED ELEMENTARY SCHOOL CHILDREN.

The small sections of this map are house-count sections of the Southern Telephone & Telegraph Co. The principals of each school recorded the number of children of each race in each house-count section. The relationship between the black and white areas of each house-count section represents the ratio between the number of colored elementary children in each section and the number of white elementary children in that section.

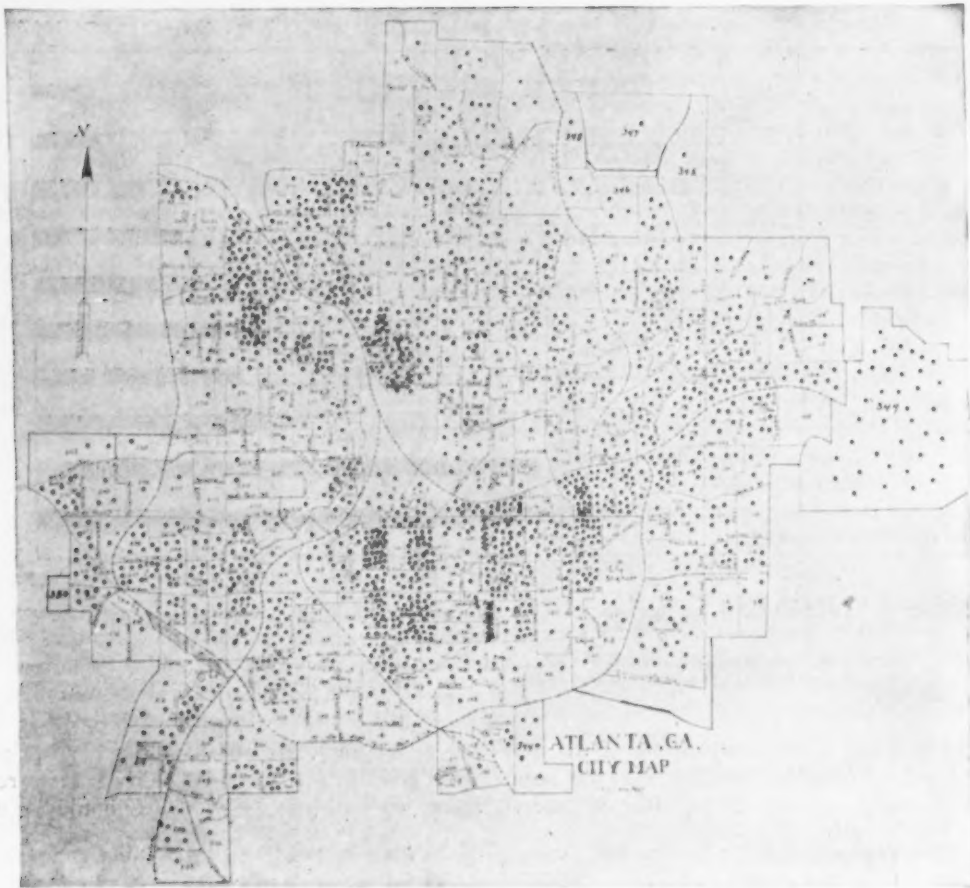


CHART 4. DOT MAP OF WHITE CHILDREN, GRADES 1-5, LIVING IN THE 350 HOUSE-COUNT SECTIONS ACCORDING TO WHICH THE ELEMENTARY SCHOOL POPULATION HAS BEEN DISTRIBUTED. January, 1922. (One dot represents ten children.)

pared section by section. If they were superimposed, densities of distribution in the various sections would be quite similar except in the outlying sections where the residential saturation point has not as yet been reached. However, Chart 4, taken separately, becomes the base for one school building program and Chart 5 the base for the school building program for the colored children.

The relationship in the present elementary school housing for the white and colored chil-

dren of Atlanta may be seen by comparing Charts 6 and 7. Again, if the charts were superimposed, the overlapping circles would show that the number of buildings for the city is unnecessarily large. Either chart taken separately shows overlapping which cannot result in economy for either the educational or the maintenance programs of the school system. The circles in each case have half-mile radii and are drawn with the schoolhouses as centers.

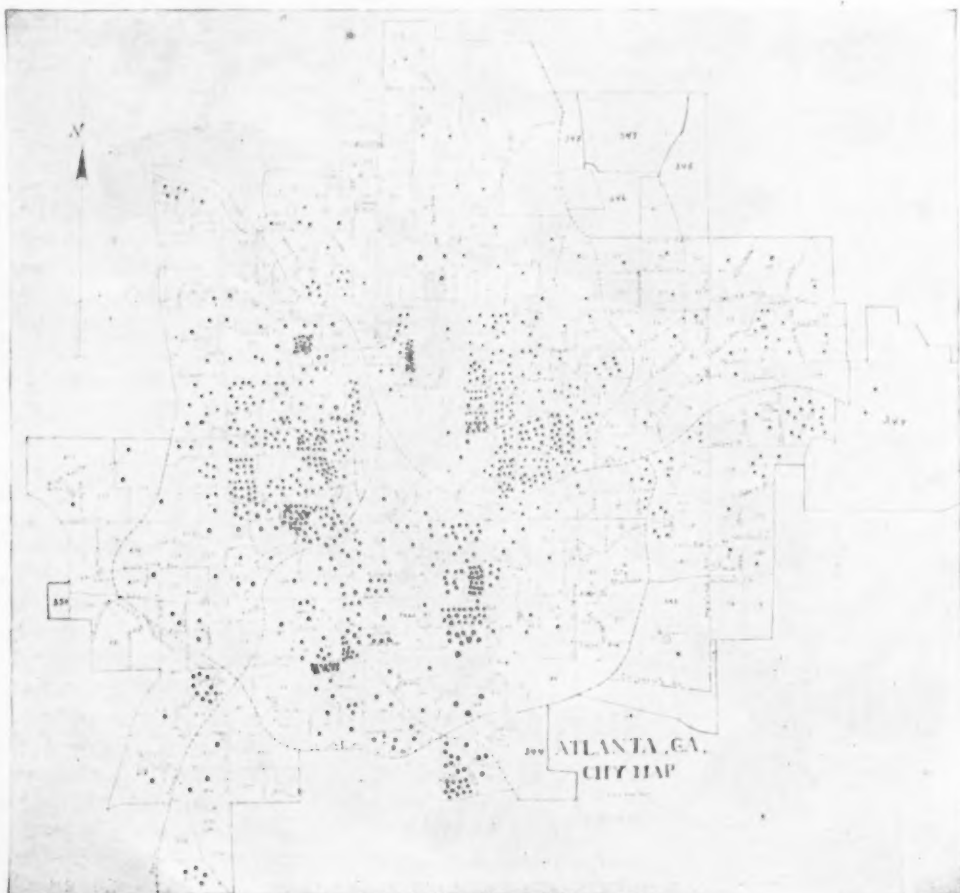


CHART 5. DOT MAP OF THE COLORED CHILDREN, GRADES 1-5, LIVING IN THE 350 HOUSE-COUNT SECTIONS ACCORDING TO WHICH THE ELEMENTARY SCHOOL POPULATION HAS BEEN DISTRIBUTED. January, 1922. (One dot represents ten children.)

Chart #6

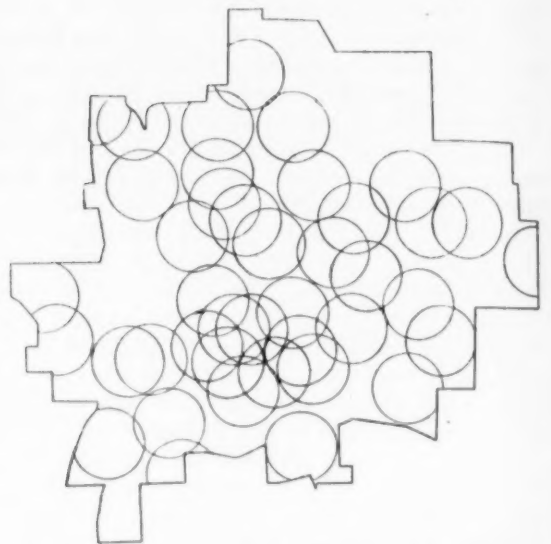


CHART 6. OVERLAPPING BETWEEN ALL ELEMENTARY SCHOOL DISTRICTS FOR WHITE CHILDREN. Circles have been drawn with a half-mile radius using the school building as the center. This overlapping can result in economy for neither the educational nor the maintenance programs of the school system.

Where great overlapping areas are found among elementary schools when the half-mile travel distance is used as a radius, the chances are that adequate modern school housing has not been provided to the degree which becomes financially possible where a minimum of overhousing exists. Atlanta's present investment of \$4,000,000 in its school plant is being made with the purpose of eliminating this overlapping and replacing the smaller antiquated structures with a fewer number of modern buildings. The condition of the existing plant may be best visualized by means of scores on the Strayer-Engelhardt 1,000 Point Score Card for School Buildings. The results of the application of this score card to both the white and colored elementary plants are shown in Charts 8 and 9. Atlanta is planning to eliminate at an early period all buildings scoring at 400 points or less.

On the basis of the population trends, school enrollment facts, the scores allotted buildings, and the overcrowding in individual schools, together with the temporary housing, a program of replacement was adopted concerning the part which each individual school building will play in the future building program. The additions and replacement were classified in three groups. Those buildings which were rated as falling in Group "X" show the most urgent need. Those in Group "Y" are second in respect to their needs and the changes for Group "Z" should be

Chart #7

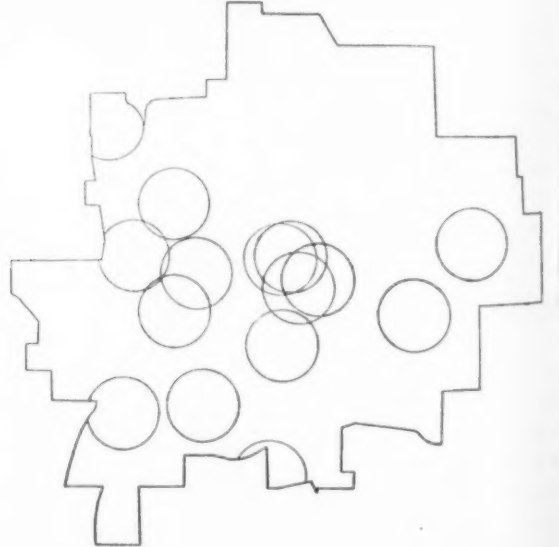


CHART 7. OVERLAPPING BETWEEN ALL ELEMENTARY SCHOOL DISTRICTS FOR COLORED CHILDREN. Circles have been drawn with a half-mile radius using the school building as a center.



CHART 8. MAP OF ATLANTA, GEORGIA.

Showing location of present elementary white schools with their scores on Strayer-Engelhardt Score Card. (A second score under the school indicates the score given to the wooden annex.)

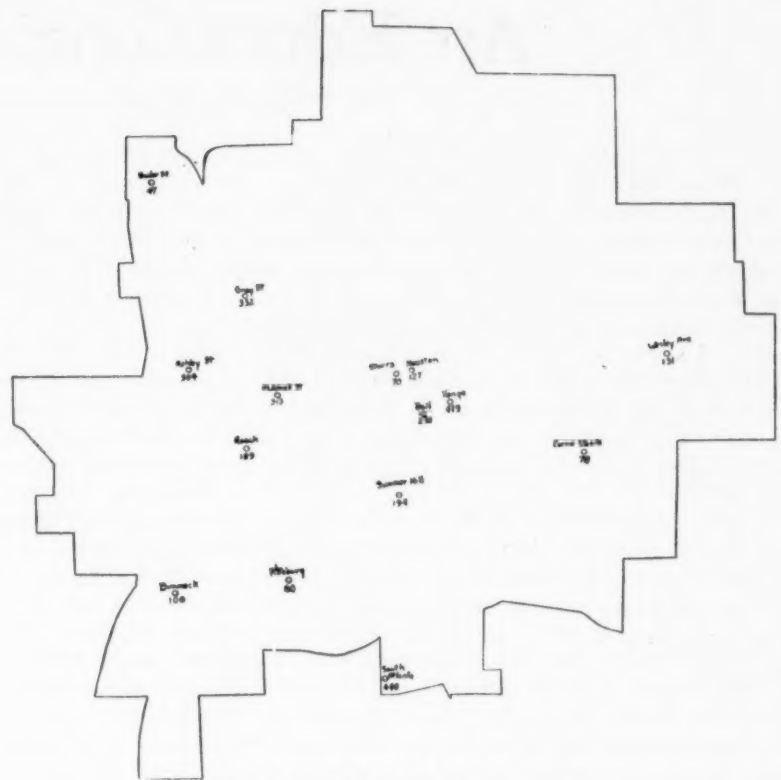


CHART 9. MAP OF ATLANTA, GEORGIA.

Showing location of present elementary schools for colored children with their scores on the Strayer-Engelhardt Score Card.

carried out as soon as the districts in Groups "X" and "Y" have been provided for.

The citizens of Atlanta realize that \$10,000,000 will be required to meet the full needs of the rehabilitation program. They have apportioned an initial \$4,000,000 in such a way as to make a splendid beginning toward betterment in schoolhousing for both white and colored children. The priority list of construction which is now under way includes the following with a suggestion of the approximate amounts to be expended in each branch of development.

PRIORITY LIST OF SCHOOL CONSTRUCTION TO BE UNDERTAKEN WITH ATLANTA'S \$4,000,000 BOND ISSUE.

White Children.

Junior high schools.....	\$ 600,000
Two senior high schools.....	1,500,000
Elementary Schools:	
English Avenue addition, Ivy Street replacement, Greenwood Avenue replacement, Fraser Street replacement, Formwalt Street replacement, Lucile Avenue addition, New Faith School, East Atlanta. Totaling elementary school accommodations for approximately 3,000 children.....	
	910,000

Total cost of proposed construction for white children\$3,010,000

Colored Children.

Junior-Senior high school.....	\$ 350,000
Elementary Schools:	
Including the Pittsburg School, Storrs and Houston, Summer Hill and Mitchell-Roach Schools	
	640,000

Total cost of proposed construction for colored children\$ 990,000

Proposed expenditures for white children\$3,010,000

Proposed expenditure for colored children 990,000

Total\$4,000,000

The earnestness with which Atlanta has begun to reorganize its school building plant is evidenced by the fact that a school building survey outlining the program for future construction and determining the approximate location of elementary, junior and senior high schools was placed in the hands of the board of education on April 1st, 1922.

At the present writing, the contracts have been awarded for the construction of all except two of the buildings listed in the priority list. Atlanta has determined to put its school building plant on the highest possible plane at as early a moment as is consistent with good construction and high grade planning. In January, 1924, approximately all of the buildings in the priority list will be available for use. Thus, the chief recommendations concerning the school plant made by the Survey Commission will become a reality in two years after the survey was begun. In the erection of buildings, as indicated in the priority list, not only will adequate school buildings be erected, but there will result a more clearly defined definition of residential areas and housing sections for racial groups, all of which will be supplied with superior school facilities.

SCHOOL ADMINISTRATION AND POLITICS.

In the field of school administration the action and reaction of politics take some queer turns. Here is a case in point. Margaret J. McCooley was slated for an associate superintendency of the New York City schools. This is a high position and exceeds in importance the school superintendency of many states.

She was eligible to the promotion from every point of view. In her capacity as school principal she had demonstrated exceptional ability, and the judgment of those in authority was to the effect that she was entitled to the distinction and would prove a valuable acquisition to the superintendency department.

But, there was a handicap. She was related to a political leader. That fact created a talk-

SIX AGES OF THE CHILD.

There are six ages of childhood that every teacher must take into account:

- 1—Chronological age (measured by years, months and days).
- 2—Physical age (the state of physical development of the body).
- 3—Mental age (measured by intelligence tests).
- 4—Pedagogical age (school classification, as 2-A or 7-B).
- 5—Social age (a measure of ability to make social contacts, to get along with other persons).
- 6—Moral age.

—Dr. Bird Baldwin.

ing point against her, and there were those who availed themselves of the same. Her appointment for the high position would be a calamity. She had won her way in the school field without political influence and was not responsible for the fact that she was related to somebody who was a political worker. But, she must be punished just the same. After all, school people should know better, and choose their relatives with more discrimination.

The board of education was, however, not stampeded by immaterial considerations. Miss McCooley was educationally and professionally weighed and measured for just what she herself was, and not by the civic and political standards of her relatives. She received the appointment unanimously.

Here is a case where a mere surmise threatened to play a decisive part, and where an unwarranted cry of politics was designed to defeat a desirable consummation. Fortunately, a body of level headed men ignored the trivial and clung to the real issue.

The incident, however, lends itself to another phase of discussion, namely, that of politics and politicians. We have never been able to conceive of a democratic form of government that did not draw its best impulse through political activity and the services of the politician, through clean, high minded and patriotic politics and politicians.

The popular conception of politics is that it is a vicious activity and of the politician that he is a selfish and dishonest being. At the same time we habitually overlook the patriotic service rendered by men in the political field that is conducive to stable government.

We are too prone to jump at the mere mention of politics in connection with school administrative affairs and overlook the fact that a school system is in itself a political institution of the highest order. It is the preliminary to that citizenship which involves politics and politicians as a prerequisite to government and to the civic, economic and moral wellbeing of a nation.

A finer discrimination between politics and politicians and a closer scrutiny between the baneful and the beneficent should be practiced in the field of school administration.

An Educational Tragedy Averted

R. V. Jordan, Superintendent of City Schools, Centralia, Illinois.

"The bell's a-ringin',
The cat's a-singin' * * * *"

So runs an old jingle that comes from goodness knows where and is heard on every American school yard. Yet, a few months ago, in one of the most prosperous communities in the world, the school bells suddenly ceased to ring (as to the cats, deponent sayeth not) and four thousand grammar school children found themselves with no better educational opportunities than the child born on the Mayflower.

West Frankfort is situated in the southern part of Franklin County, Illinois, in the midst of that part of the state which for more than a quarter of a century has borne the name of Egypt. Nature was particularly lavish in bestowing riches on this section but she did not show it in her countenance. For nearly a century the hardy pioneers fought persimmon sprouts and buckhorn to scratch a niggardly living from the reluctant soil, little suspecting that just below the bottoms of their hard digged wells, underneath a perfect roof of slate, lay a nine-foot vein of the finest bituminous coal in the world. In 1893 a flat car load of coal from this region was exhibited at the Chicago World's Fair in a single piece and now an area of over four hundred square miles is covered with a network of mine shafts, railroad switches, and cut-offs.

Seventeen years ago the writer drove across the site of West Frankfort, deliberately, in a buggy. The town at that time consisted of a little goods-box of a railway station sitting in the midst of a "craw-fish" prairie flat. The opening up of great coal properties has changed all this. Today one sees a thriving industrial city with paved streets, fine business blocks, elegant homes, beautiful churches, and a palatial township high school building that cost nearly a half million dollars when construction was cheap. The present school district contains a population of over twenty thousand.

What the Dunlap Law Aimed At.

In the early days of this, as in all similar communities, education had a hard struggle. The basic business was owned by great corporations whose stockholders lived at a distance and had no personal interest in the education of the children of their employees. Add to this the fact that the coal properties lay outside the city school district and could not be taxed to educate the children of the men who worked them and you have a situation that seemed to make adequate education impossible. Short terms, overcrowding, poor equipment, bad sanitation, poorly paid, poorly prepared teachers were all that the district had money to buy.

And then came the Dunlap law. It was designed to remedy just such a situation. Under this statute a community consolidated district may be formed of contiguous territory bounded by district lines, by a majority vote of the voters of the entire territory designated. It is plain that under this statute a populous district may, in effect, annex one or more less populous districts against their will. However, the law has been held to be constitutional by a circuit court and it is at present the only possible solution for providing adequate public education in the mining towns of Illinois.

In the spring of 1921, public spirited citizens of West Frankfort secured the necessary signatures to a petition for the formation of a community consolidated district under the Dunlap law. At the election, the citizens of West Frankfort voted strongly in favor of the propo-

sition and the citizens of the outlying districts voted strongly against it. As a result, the districts of West Frankfort, Frankfort Heights, Snipe Flat, Union, Joiner, and Moore were consolidated. This territory includes six large coal properties, one of which, Orient number two, will when completed, be the largest coal mine in the world. Some of the others are valued well above the million dollar mark. It is a question whether, outside of metropolitan business districts, one could run lines enclosing so much valuable property within so little space.

Following the prescribed course, a Board of Education was elected and the Frankfort community consolidated district conducted its schools during the school year 1921-22. There were about four thousand pupils enrolled and about one hundred teachers employed to instruct them. The new district did not indulge in any extravagances. There were no fancy salaries paid to teachers or supervisors; no buildings were built; no money was wasted for furniture or apparatus; in fact, the physical equipment of the schools is still poor. And yet in their second year the schools were forced to close down after running twenty days.

Acquired Debts and Enemies.

Along with the valuable taxable property the new district acquired two other very common but very undesirable commodities, debts and enemies; the debts were handed over by the old districts and the objectors developed, for the most part, among the rural taxpayers. It seems that the debts acquired from the old districts amounted to about \$65,000 and that this amount has neither been increased nor diminished since the new district was formed. During the first year the teachers were paid in anticipation warrants during the early part of the year. These warrants were redeemed and held by the local banks. The use of warrants for this purpose is very common throughout the state; the superintendent of public instruction recently made the statement that there is over a million dollars of school indebtedness being held by local banks.

When school opened last September there were two new developments; a funding bond issue of \$65,000 had been defeated by a slender majority and enemies of the district had instituted a suit to test its legality. Before the close of the first school month the funding bond issue had been defeated a second time. Some of the reasons alleged for its defeat are (1) a general feeling of repugnance toward any measure savoring of an increase in taxes and (2) some ill-given advice on the part of some local leaders, for example, the advice that the schools would continue to run whether the bond issue carried or not because the state department of education would not allow them to close.

So the teachers received for their first month's compensation the usual anticipation warrants but found to their consternation that the local banks would not cash them. In view of the temper of the voters of the district and the fact that the legality of the district had not yet been passed upon by the court, one can readily sympathize with the attitude of the banks. And in view of the action of the banks and voters, one can readily sympathize with the reaction of the teachers when they left their rooms en masse.

Immediately an appeal went up to the state department of education to cause the schools to reopen. But the school system of Illinois is very loosely organized and the only whip which the state department holds over a board of direc-

tors or a board of education is the withholding of distributable funds for certain infractions of the school law, e. g., the failure to maintain school for at least seven months each year.

State Department Without Power.

The state department replied that it had no power to reopen the schools but would apply the penalty incurred unless the schools were kept in operation for at least seven months. Since the amount of funds due to be distributed to the district amounted to about \$19,000, almost one third of the vexatious indebtedness, the possibility of losing it by careless indifference became an entering wedge in the minds of those who, otherwise, would have been willing to let the bell remain silent for the rest of the year.

Meantime, the children roamed at will, not so happy in their freedom as they had expected. The superintendent and some of the teachers accepted other employment. Some of the pupils enrolled in the schools of neighboring cities. A number of small private schools sprang up, reflecting the conditions of colonial days. But all these little subterfuges could have only as much effect in turning back the tides of ignorance as the old woman's broom had upon the sea.

But the leaven of the state's threat and the knowledge that their children were growing up under the blight of ignorance were working in the minds of the thinking class. The circuit court sitting at the county seat had now declared the district legally formed and valid. This meant that its bonds would be salable and its obligations collectable unless the state supreme court, acting on an appeal, should reverse the circuit court. In this right of appeal, the enemies of the district had one last weapon and they seemed disposed to use it. This would incur another long delay no matter what the outcome; the chance of maintaining a seven-month school within the fiscal year was rapidly slipping away and with it the coveted nineteen-thousand-dollar distributable fund.

Another matter that should not be omitted from consideration is the tax levy and the valuation. The valuation for the new consolidated district is reported from a reliable source to be \$3,500,000; this is the taxable valuation, one-half the true valuation. This valuation is pitifully low; the writer is of the opinion that it could be equitably borne by the coal properties of the district alone. It happens to coincide exactly with the valuation of a nearby district with about half the enrollment, and not a single mine, oil well, or taxable big business within its borders; and the school board of this latter district think their valuation is too low.

The time seems ripe for some educational economist to prepare a book under the title, *wanted a tax assessor*; low valuations are not confined to the Frankfort community consolidated district. Although the school board did all in their power and levied the limit¹, they received barely enough to pinch along with, they were unable to lower their outstanding obligations or pay their teachers in cash, they were forced to the unfortunate expedient of a bond issue, and the schools were temporarily forced out of existence. This story might never have been written if there had been a fair valuation placed on the taxable property.

The forces of compromise now took the center of the stage and seemed to do most of their act-

¹It is true that the board levied the limit the second year. But, it is alleged, the first year they accepted the levies already made by the old districts. Thus another factor is introduced; the reader may draw his own conclusions.

Scientific School Supervision

E. E. Lewis, Superintendent of Schools, Rockford, Illinois.

There are at least three ways of measuring the accomplishment of the pupil in the public school; namely, by personal opinion; by comparison with other pupils, and by standard units of accomplishment. The first two methods have long been used and will undoubtedly continue in use despite extensive progress in educational measurements.

Personal opinion is valuable to the extent that the person who renders the opinion is expert and unbiased. Comparison with others is more valuable, provided the comparison is fair and extensive. Comparison is the method commonly used in marking or grading pupils. It serves to show the position of the pupil among other pupils of his class and enables his teachers to roughly measure him in relation to good, bad and average pupils within her experience. Usually, comparisons are inaccurate, simply because things are compared that are not comparable. Furthermore, the items of comparison are usually intangible, non-get-at-able items that lack objective value.

For hundreds of years these two methods—personal opinion and comparison—have been used in many fields of knowledge and have gradually given way to more scientific units. Scientific units have been developed laboriously in research laboratories but more often by trial, error, and success in the field of experience. This has been done at enormous cost in time, labor, and money. Thus, the yard stick succeeded the comparison, long, longer, longest; short, shorter, shortest; the thermometer succeeded the comparison cold, colder, coldest, and a thousand other units of mechanical measurement, now commonly used, have succeeded cruder opinions and comparisons.

In education, scientific units are now being invented. It is much fairer and far more accurate to measure the general intelligence of a child in terms of an I. Q. (intelligence quotient) than it is in terms of "bright," "average" or "dull." Furthermore, an I. Q. means practically the same thing anywhere the child may happen to go, while, "bright," "average" or "dull" may change in meaning when used by the same person a half hour later.

Limitation of Marks.

Students of education are well acquainted with the startling results secured by many investigators in all parts of the United States who have tested the accuracy of the usual classroom examination marks. Until recently marks have been the universal measures of school work. Many problems in the instructing and handling of a school hinge upon the assignment of marks or grades. Such problems as the amount of credit, the failure, promotion, demotion, retardation, elimination, and graduation of pupils; the problem of granting honors and giving positions are common everywhere. These are all critical problems and it would seem that the marks given in the usual examinations should possess a large measure of scientific value. But teachers differ enormously in evaluating the same piece of work, and they differ as much in one subject as in another. An illustration will make this clearer.

Starch and Elliot gave two final examination papers written by pupils in first-year high-school English to 142 English teachers; one final examination paper in geometry to 118 teachers of mathematics; one final examination paper in American history to 70 teachers of

history. The results were astounding. The marks of the first English paper ranged from 64 to 98; of the second English paper, from 50 to 98; of the geometry paper from 28 to 92; and of the American history paper, from 43 to 90. A pupil's success is subject to chance under such a system. If he takes the examination under one teacher he gets 43 and if he takes the same examination under another teacher he gets 90. All of the teachers included by the foregoing study were as competent as teachers are everywhere but they are everywhere attempting to do a thing that is scientifically impossible.

Need of Standard Units of Education.

Teachers too often assign tasks and hear lessons without thought of quantitative standards other than the covering of the book or the course of study and the passing of the examinations. Public education needs to supplement crude opinion and comparison with standard units in all fields. The following are needed and in part developed. Building standards, mental-capacity standards, subject-matter standards, teacher standards, supervision standards, and many others might be named.

Definiteness.

Standard units for measuring the accomplishment of pupils means definiteness where at present vague generalities prevail. The time is ripe for the establishment in every community of an efficiency bureau or department either on a small or large scale that shall have the double duty of inventing new and better units of educational measurement, and of applying those already available.

Economy.

Consider for a moment the wasted time and effort spent in teaching children to read. The rate at which a child reads is in itself a fair measure of the mastery which the reader has of the printed page. The poor reader is unable to pass quickly from the printed symbol to the meaning and pronunciation. He loses time in performing the preliminary mental acts which are necessary before he can comprehend the meaning or pronounce the words. The good reader performs the mental acts quickly and the mechanics of the process are easy and his reading fluent.

Now, every teacher should know from time to time the improvement her pupils are making in the rate of reading. But accuracy and comprehension are also factors which must not be ignored. Furthermore, the rate of oral reading is one thing and the rate of silent reading another. Suppose the teacher knew the standard rate of oral reading and the standard rate of silent reading together with an accuracy score and a comprehensive score for a seven-year old child. It would be possible to mark or grade a given child in relation to that standard. The teacher would know definitely what she was expected to do. The pupils, and the parent of the pupil, likewise would know what was expected of them.

What St. Louis is Doing.

A number of cities are conscious of this need in reading as the following quotation concerning St. Louis reveals: "In the past the supervision of reading in St. Louis as well as of other subjects, has been largely personal in character. Principals and supervisors have visited classrooms frequently and have offered such suggestions as their good judgments dictated. During the last few years a demand has arisen for a type of supervision which measures the results of teaching as well as the

methods of teaching. There has been a growing recognition of the fact that this point of view is indispensable in expert supervision."

"Beginnings of this two-fold type of supervision has been made in St. Louis. In connection with the supervision of the Laclede School the principal has adopted measures of the results of teaching as a permanent part of the routine of supervision. At times the general supervisors of St. Louis have utilized or recommended similar devices. In a recent issue of the Superintendent's report the following statement occurs: 'In order to ascertain the ability of third grade children to assimilate the content of what they read they have been tested twice on typewritten stories of about 250 words.' Such devices secure the type of information which should be secured frequently in connection with the supervision of reading.

"On the basis of such facts a supervisor is able to locate strong and weak points in his schools, to analyze the causes of variations, to receive suggestions concerning desirable modifications in instruction, and to estimate in a more thoroughgoing way than is otherwise possible the character of the results which are secured by the teachers under his instruction. It is earnestly recommended that supervisors and principals alike introduce objective measures or scientific standards and units of measurement, as a permanent part of their routine of supervision.

"It is necessary that standards of attainment be established. In this connection the teachers as well as the supervisors should take an active part. By tests given throughout a city, standards of attainment should be derived. Each teacher should become familiar with the methods of giving these tests. She should frequently utilize them in examining her work to find sources of strength and weakness. Through cooperation of teachers and supervisors progressive revisions in standards of attainment and methods of procedure will be made.

"This type of cooperation is necessary because it is only when all of the units of a school system work consistently together toward clearly defined ends that the most effective results can be secured. It is therefore recommended that methods of testing be introduced which will define clearly the ends to be attained, which will aid the supervisor in making his services more pointed and effective, and which will enable the teacher to improve daily the quality of her instruction."

Tests Used in Rockford.

In Rockford, Illinois, in 1915, standard tests and scales were first introduced in the following subjects: handwriting, arithmetic, spelling, English composition, and silent reading. In handwriting, Thorndike's scale was used; in arithmetic, Curtis standard tests in addition, subtraction, multiplication, and division; in spelling, Ayer's spelling scale; and in composition, the Hillegas composition scale.

These scales and tests were first used by the superintendent, supervisors, principals, and teachers as an experiment chiefly, but with such favorable results that the testing program has been continued since that time and has been expanded until today tests and scales are accepted by all as a matter of course just the same as text books and other instructional aids. There is set aside in the annual budget a sum of money for the purpose of such tests and scales and the expenditure for this item nearly always equals the appropriation.

Note. Paper read before the Illinois State School Board Association, October 28, 1921.

Number and Kind of Tests.

The number of copies of educational and intelligence tests purchased by the Board of Education of Rockford, Ill., for each of the years 1916-21 inclusive, was as follows:

1916-1917.

100 copies—Gray's Oral Reading Test.
100 copies—Gray's Silent Reading Test.
692 copies—Courtis Standard Tests in Arithmetic.
800 copies—Trabue's Completion Tests.
400 copies—Woody's Arithmetic Scales.

2,092—Total.

1917-1918.

200 copies—Gray's Oral Reading Test.
1,600 copies—Gray's Silent Reading Tests.
350 copies—Rugg's Algebra Tests.
1,000 copies—Courtis Standard Tests in Arithmetic.

3,150—Total.

1918-1919.

3,600 copies—Courtis Standard Tests in Arithmetic.
600 copies—Fordyce's Tests and Questions.
25 copies—Hahn-Lackey Geography Scales.
100 copies—Stanford Revision—Binet Simon.

4,325—Total.

1919-1921.

150 copies—Stanford Revision of Binet Simon Test.
1,200 copies—Courtis Standard Tests in Arithmetic.
2,200 copies—Gray's Oral Reading Test.
1,000 copies—Holley's Picture Completion Test.
7,200 copies—Charter's Language and Grammar Tests.
1,000 copies—Holley's Sentence Vocabulary Tests.
10,000 copies—Cleveland Survey Arithmetic Test.
300 copies—Ayre's Gettysburg Handwriting Scale.
4,700 copies—Monroe's Silent Reading Test.
1,600 copies—Buckingham's Geography Test.
1,600 copies—Buckingham's Information Test in Grammar.
300 copies—Ayre's Spelling Test.
900 copies—National Intelligence Test.
826 copies—Otis Intelligence Test.
1,000 copies—Haggerty Intelligence Test.
200 copies—Standard Revision Binet Simon Test.
760 copies—Harlan American History Test.
2,400 copies—Freeman Handwriting.
1,500 copies—Monroe Diagnostic Arithmetic.
100 copies—Omaha Group Test.
25 copies—Willing Composition Scale.
1,700 copies—Yerkes' Intelligence Scale.
500 copies—Courtis Silent Reading.

1921-1922.

500 copies—Gray's Oral Reading.
200 copies—Courtis Geography Test, Form A.
2,600 copies—Haggerty, Delta I.
25 copies—Haggerty Sigma.
800 copies—Otis Intelligence.
2,000 copies—National Intelligence.
1,000 copies—Monroe Reasoning.
300 copies—Stanford Revision Binet Simon.
300 copies—Illinois Examination No. 2.
650 copies—Brigg's English, A and B.

Purposes of Tests and Standards.

All of the tests have been given for the following purposes:

1. As an experiment to test the value of such tests.
2. In order to better classify pupils in subjects, grades, and special classes.
3. In order to study individual and group differences and to more carefully adjust instruction to the needs of the same.
4. In order to direct remedial work in special cases.
5. In order to determine special promotions.
6. In order to save money by the early detection of causes for retardation and the early application of remedies for as many of these causes as possible.

The application of tests for remedial work is best illustrated by citing a case typical of hundreds that have been detected and remedied.

Remedial Work in Reading.

In December, 1920, Eleanor, age 7 years, 11 months, grade 3B in one school was reported



CHARLES A. LEE,
Superintendent of Public Instruction,
Jefferson, Mo.
(See Page 100.)

as being unable to read. She made zero score on Gray's Oral Reading Tests and was unable to make any progress in the regular class work in reading, but maintained an average in other subjects. Dr. Wilgus, the psychiatrist, employed by the board of education, found upon examination that the child had an I. Q. of 100 and was mentally about 8 years old. It appeared that Eleanor's retardation in reading was due wholly to slowness of mental processes, and that special attention would undoubtedly be of much value.

After consultation with the teacher and principal it was decided to have Eleanor remain in her regular class, but, in addition, to have special coaching in reading by the unassigned teacher for the building. This was begun in December, 1920, a few days after the examination.

During the next six months Eleanor reviewed phonetics from the beginning and was given primer reading. She read three primers and several first readers and two second readers in order to fix her reading vocabulary. Perception cards and blackboard reading were used extensively and her father helped her at home and aided her in securing books from the library for home reading.

May 19, 1921, six months after the diagnosis of the case, Eleanor was again tested by means of Gray's Oral Reading Test and this time scored 38¾ points against a score of 0 in December, 1920. The standard for the 3B grade of which she was a member was 43. Coaching was continued until the end of the school year and Eleanor was promoted along with her classmates and is today keeping abreast of her grade in reading as well as other subjects. The permanent retardation of this child was undoubtedly prevented by this remedial work.

In the semester closing January 25, 1922, the unassigned teacher in one building reports that she has been able to save 42 children from repeating a semester's work. The cost of instruction per capita for an elementary school pupil is \$86.05 in Rockford and per semester \$43.03. Therefore, this teacher has saved the city \$1807.26 minus her salary for the semester which is approximately \$750.00.

Rockford employs a psychiatrist for special mental examinations. The elementary supervisor is responsible for the direction of the testing program. The service of these two departments is increasingly valuable and already there is available a fund of information that makes it possible for us to set up certain scientific standards for the system. A later article will

deal with these specifically. Further illustrations of the value of the work is shown in the following cases:

Unusual Record in Oral Reading.

A recent survey shows that the first three grades in the Garrison school are leading the city in the matter of oral reading. The 1A class in the Garrison school made a score of 43 which is twelve points above the average for the United States and is as high as the average 2A class makes throughout the United States.

The 2A class in the Garrison school made a score of 46.9, which is nearly 4 points higher than the average for the United States and is nearly 1 point above the score for the average 3A pupils. It is interesting to note that in 1919, the 2A score in the Garrison school was only 36. The Garrison school is handling reading today better than it was two years ago. The results are very encouraging and justify the administration in introducing the new system of teaching phonetic reading.

The 3A class in the Garrison school made a score of 54 against the standard for the United States of 46.

The pupils in all three grades in the Garrison school are reading a larger number of books than ever before. One pupil read 59 books in 20 weeks, another 56, another 53, another 43, another 42, another 23, another 16 and another 13. How many parents have read on the average of 1½ books or even 1 book a week? Some one has said that there are four ways to learn to read. The four ways are read, read, read, read. The quantity of reading that a child does is a measure of his joy in reading as surely he would not do it unless he enjoyed it and we all know that when we do things because we enjoy them, we somehow learn more rapidly than we do otherwise.

It is to the credit of the first, second and third grade teachers of Garrison school that they have stimulated the children to read to such a large extent. The fact of the matter is that in most of the subsequent grades in arithmetic, geography, history and other subjects, the failures come from faulty habits of reading. If the child can learn to enjoy reading in the first grades and to read, read, read, read constantly, his chances of success in subsequent grades are greatly increased.

Paul, age eight years eleven months, was presented to Dr. Wilgus for the Binet examination in Dec., 1920. He was then in 2A Grade. He had spent one year in 1B Grade, and two years in 1A, then one year in 2B and one year in 2A. In the Gray's Oral Reading test, he scored nothing, and was not able to do any of the reading required in that grade. Dr. Wilgus found his I. Q. to be 90 and suggested that his retardation may have been due to enlarged tonsils. It was decided to place him in a special group with the unassigned teacher where more phonics and reading could be given in addition to what he was doing. Various drills and perception cards were used, the new Beacon system taught, and in June he was able to score 13.75 in the Gray Oral Reading test against a standard of 43. At this time he was again presented to Dr. Wilgus for re-examination, his I. Q. found to be 87.6. It was decided to keep him in the same grade and continue working with unassigned teacher. He began showing a wonderful progress, and seemed to grasp the fundamentals in reading very firmly. In Jan., 1922, he was able to score 50 against a standard of 43 and could read a third reader very readily. He is now doing 3B work without further aid from unassigned teacher.

Roy was exceedingly backward in reading, but did fairly well in arithmetic. He had repeated 2A and was not up to his class in either

(Concluded on Page 136)

The Conviction of Legislators

For Failure to Enact Effective Compulsory Attendance Laws

H. R. Bonner, Formerly Statistician of the U. S. Bureau of Education.

The tax-payers of the nation have a right to know why the public school system is permitted to waste 250 millions of dollars annually or one and one-half millions of dollars every day the schools are in session. There ought to be a court of justice before which malicious, negligent, and ignorant legislators could be brought to give an account of their conduct when passing laws regulating the control and management of public education.

To be found guilty of enacting such "wishy-washy" laws as now exist—laws permitting one-fourth of all the children enrolled in school to "play hookey" every day—constitutes a serious offense—one reflecting a lack of intelligence on the part of legislators,—one reacting unjustly on the tax-payer who supports the school system—and one constituting an educational crime against childhood itself. Over five millions of children out of school every day! This startling fact alone ought to arouse the Nation to intelligent legislative procedure.

I can see before me on the sea-shore a bank employing 200 clerks. These clerks are employed eight hours each day that the schools are maintained and are engaged in defraying the expenses of this educational enterprise. They are each paying out money at the rate of a dollar a second and are kept busy every minute of the day. One hundred and fifty of them are paying out money for teaching the boys and girls who are actually at school, but, lo! 50 clerks are engaged in shoveling money into the sea to be forever washed away.

This good American money amounting to \$1,500,000 per day is thrown away when it should be used to educate the children who "play hookey." This is only the gross result of ineffective legislation—what are the specific charges against our law makers?

The Go as You Please Method.

No fewer than 30 States must plead guilty to the charge of permitting children in the kindergarten to go to school only at their pleasure. Not a single one of the 30 but what has legalized the kindergarten, but not a single one that requires little children to go to school regularly! I am referring to the 30 States, shown in figure 1, beginning with Arizona, which have a "dotted" section at the left end of the bar. This section represents the ages when these little "tots" are permitted to go to kindergartens. Thus, in Arizona the kindergarten age is from 4½ to 6; in Idaho, from 3 to 6; in Virginia, under 6; etc.

What is the result of this method of come-and-go-as-you-please? Almost one-half of all the children enrolled in kindergartens are out of school every day. Two hundred and fifty thousand cases of "hookey" in the kindergarten every day! And not a single child can be prosecuted! Teachers have been employed, buildings have been constructed, necessary conveniences for instruction have been provided—all at the expense of the tax-payer—yet irregular attendance is legally countenanced.

The second charge, to which all the states, except Ohio, must plead guilty, consists in permitting a continuation of this practice of come-when-you-please in the lower grades of the elementary school. Some of the states are more guilty than others as shown in figure 1 by the length of the white section of the bar immediately preceding the black central section. For example, in Alabama children are permitted to

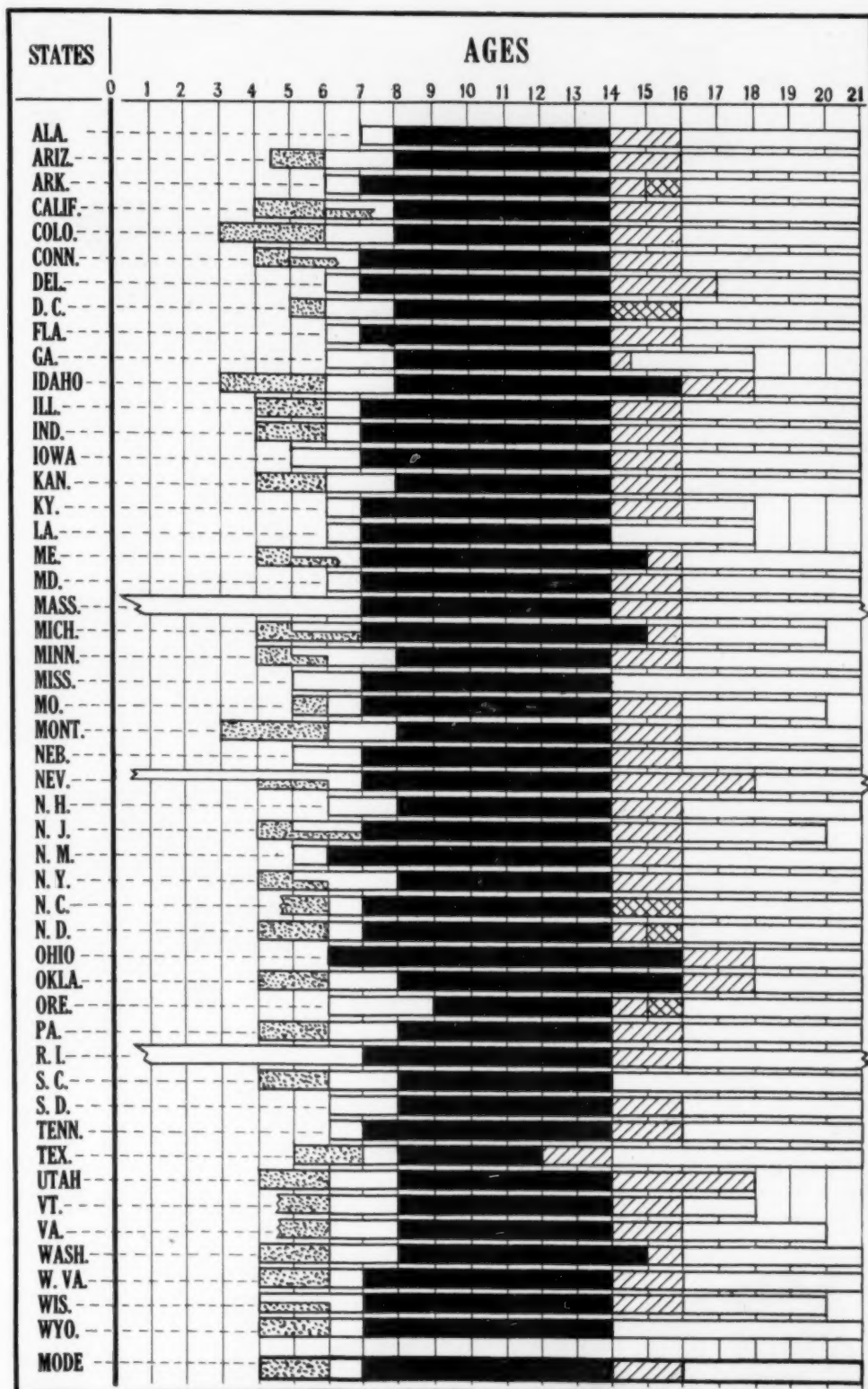


FIG. 1. DIFFERENT AGES WHEN CHILDREN MAY OR MUST ATTEND SCHOOL.

Provisions in effect January 1, 1923. The dotted sections of the bars indicate the ages when children may attend kindergarten; the black sections, the ages when children must attend school. The open sections of the bars indicate the "optional" attendance periods during which children may attend school but are not required to do so. The single-lined sections indicate the time during the compulsory attendance period when children may obtain employment certificates. The cross-lined sections indicate the ages when children who have completed the compulsory attendance period must obtain employment certificates in order to go to work.

go to school after their seventh birthday but are not obliged to go regularly or even to go at all until they have reached their eighth birthday. In Arizona this "optional attendance" covers a period of two years.

What is the result of this policy of being courteous? Children go to school for a while when they are first permitted to do so, "catch a bad cold" or some other disease peculiar to childhood, and often never return again during the year, even after they have fully recovered. The net result of such a policy is that there are more children repeating the work of the first

grade in our public schools than there are boys and girls enrolled there for the first time.

This type of tolerance necessitates re-teaching in the first grade about one-tenth of all the children enrolled in our public schools. In fact, there are today more "repeaters" in the first grade than there are boys and girls enrolled in all the public high schools of the United States. Even in our cities over one-third of all the children in the first grade are "repeaters." Would it not be a good plan to imprison the originators of such laws for the next decade and send

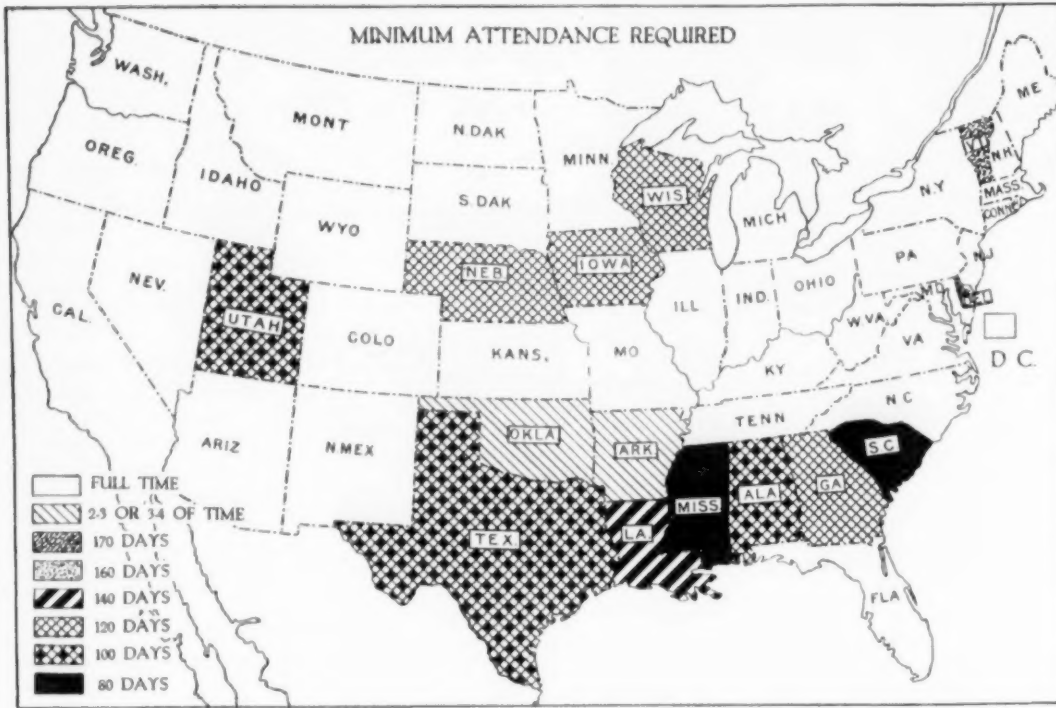


FIG. 2. MINIMUM ANNUAL SCHOOL ATTENDANCE REQUIRED DURING THE COMPULSORY ATTENDANCE AGE. PROVISIONS IN EFFECT JANUARY 1, 1923.

interested parents and tax-payers to our legislatures during this period of incarceration?

What is the third charge against our "regulation makers"? Your Honor, Sir! they have provided for seven or eight years of elementary education at the expense of our tax-payers and all but ten States, Idaho, Louisiana, Maine, Michigan, Mississippi, New Mexico, North Carolina, Ohio, Oklahoma, and Tennessee, have failed to require children to attend school during this length of time.

In justice to their acts, however, it should be said that most of the states have a compulsory attendance period two years longer than the black section of the bars shown in the diagram, but during this period, covering the ages from 14 to 16 generally, officers usually issue employment certificates to those who desire to leave school and go to work. This is the work-or-go-to-school age, for which every state has provided except Louisiana, Mississippi, South Carolina, and Wyoming. In these four states it is a do-as-you-like age.

Encouraging Hookey Play.

There is still another indictment against these public spend-thrifts. They have enacted laws permitting those who have passed the compulsory attendance age to go to school when they

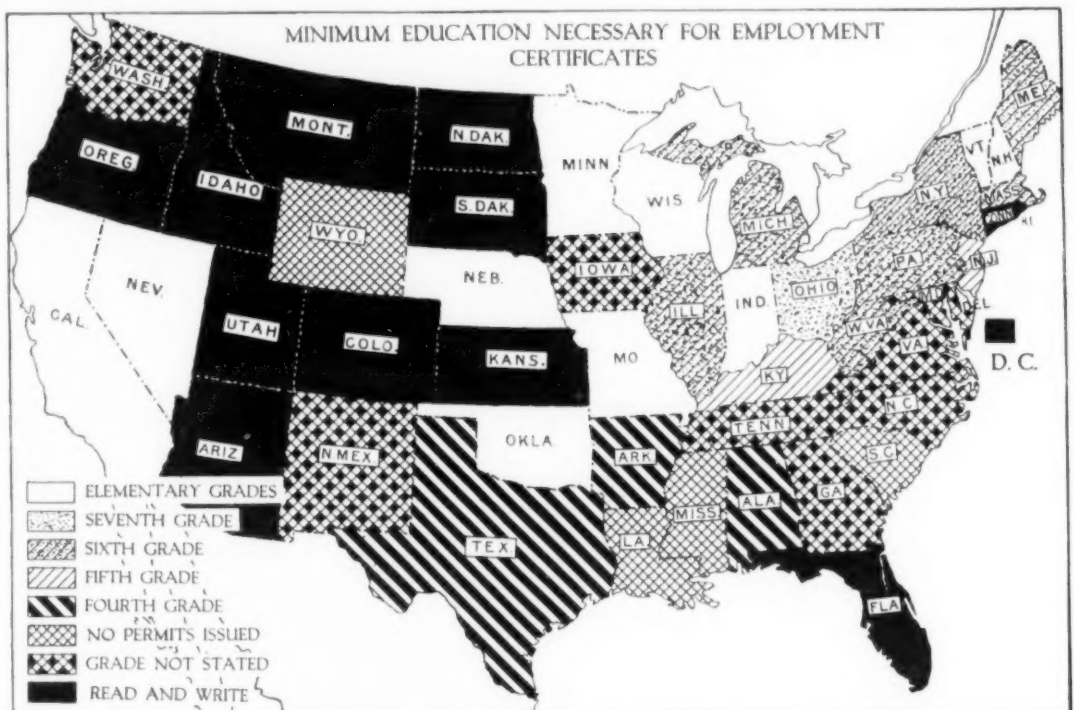


FIG. 4. MINIMUM EDUCATIONAL STANDARDS WHICH CHILDREN MUST MEET IN ORDER TO SECURE EMPLOYMENT CERTIFICATES. PROVISIONS IN EFFECT JANUARY 1, 1923.

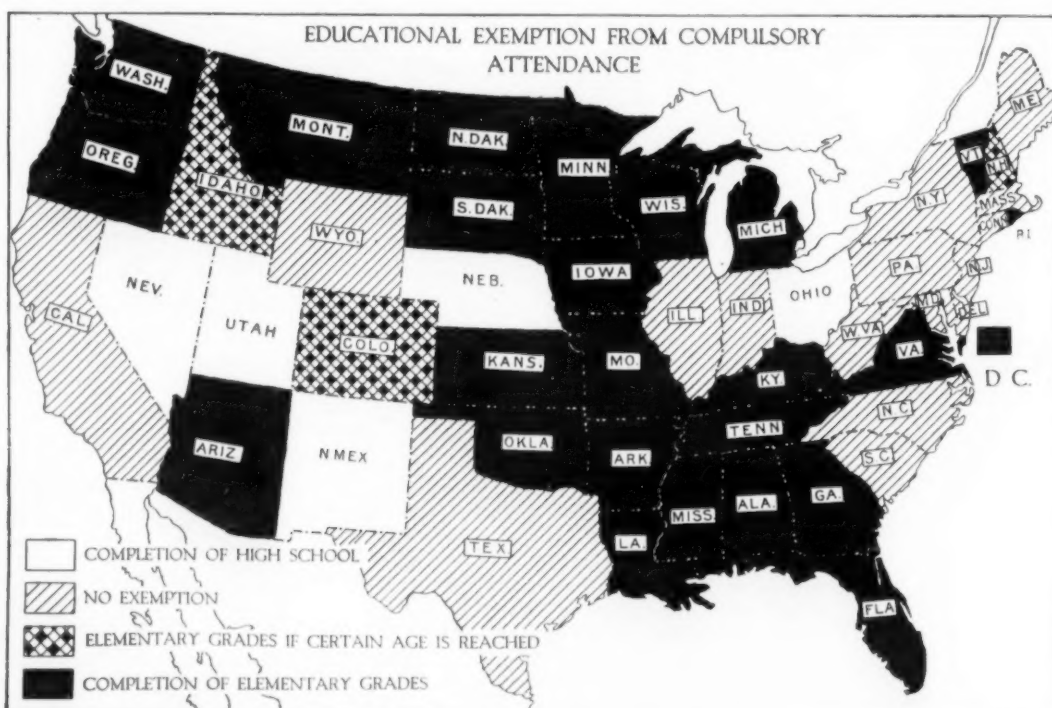


FIG. 3. EDUCATIONAL STANDARDS WHICH EXEMPT CHILDREN FROM FURTHER SCHOOL ATTENDANCE DURING THE COMPULSORY ATTENDANCE PERIOD. PROVISIONS IN EFFECT JANUARY 1, 1923.

please or to play "hookey", when they feel like it. This tolerance of irregular attendance on the part of older children sets a bad example for the younger pupils and makes the tax-payers supply more teachers than are actually necessary to conduct the work of the school when the attendance drops off. Utah is the only state exonerated from this charge.

It may have been only thoughtlessness on the part of legislators not to require regular attendance when attendance is permitted, but the criminal law is merciless and forgives no one, even for ignorance or short-sightedness. It is, indeed, strange that no state requires children to attend school regularly during every year when they are permitted to go. Admission to school at any time ought to be accompanied by a requirement that attendance be regular. Such a law would decrease the number of "repeaters", promote school survival, and reduce the waste of public money.

Before imposing sentence on these offenders let us take into consideration another charge of delinquency. Fourteen states are charged with providing a longer school term at public expense than children are required to attend, even during the compulsory attendance period. For

this offense the legislators of Georgia and Mississippi should receive the longest sentences, for they have required such children to go to school for only 80 days per year. In both instances the average school term is from 30 to 40 days longer than children are required to attend.

Texas, Utah, and Alabama require attendance for only 100 days; Georgia, Iowa, Nebraska, and Wisconsin require it for 120 days, Louisiana, for 140 days; Delaware for 160 days; and Vermont for 170 days. Oklahoma and Arkansas have deliberately provided that children may stay out of school one-fourth or one-third of the time. These fourteen groups of legislators should receive sentences according to the gravity of their crimes. How much longer will we tax A to educate B's children and then permit B's children to stay out of school and waste A's money?

The Exemption Evil.

The judge of this imaginary court asks if any of the states exempt children from attending school during the compulsory attendance period when they have reached certain educational standards. Yes, all the states colored black in figure 3 exempt from school attendance children who have completed the elementary grades, regardless of their age. Furthermore, all the

Alabama
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Hampshire
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

1 Three
2 Seven
3 Provi
4 Or at
5 Three
6 schoo
7 Child
8 schoo
9 illeg
10 year
11 Child
12 the
13 Child
14 If ill
15 Child

states
the di
childre
the oth
provid
The
found
lined i
exemp
a high
tained
In t
to rec
water
The g
seen fi
ation

SIGNIFICANT PROVISIONS OF COMPULSORY ATTENDANCE LAWS, IN EFFECT JAN. 1, 1923.

States	Age groups.				Minimum Annual Attendance Required	Educational Exemptions from Compulsory Attendance	Minimum Education Necessary for Labor Permits	Regularity of Attendance Required	Minimum School term Months
	Kinder-garten	Elementary and Secondary	Compulsory Attendance	Age for Labor Permits					
1	2	3	4	5	6	7	8	9	10
Alabama,	...	7-21	8-16	14-16	100 days	Elementary grades	Fourth grade	Consecutive	None
Arizona,	4½-6	6-21	8-16	14-16	Full term	Elementary grades	Read and write	Consecutive	6
Arkansas,	...	6-21	7-15	14-16	¾ of term	Elementary grades	Fourth grade	Not stated	None
California,	4-	6-21	8-16	14-16	Full term	None	Elementary grades ²	Consecutive	8
Colorado,	3-6	6-21	8-16	14-16	Full term	Elementary grades ³	Read and write ⁴	Consecutive	5 ½
Connecticut,	4-	6-21	7-16	14-16	Full term	None	Read and write	Consecutive	9
Delaware,	...	6-21	7-17	14-17	160 days ⁷	None ⁷	Elementary grades	Consecutive	8
District of Columbia,	5-6	6-	8-14	14-16	Full term	Elementary grades	Read and write ⁸	Consecutive	9
Florida,	...	6-21	7-16	14-16	Full term	Elementary grades	Read and write	Consecutive	4
Georgia,	...	6-18	8-14	14-14½	120 days	Elementary grades	Not stated	Consecutive	6
Idaho,	3-6	6-21	8-18	16-18	Full term	Elementary grades ¹⁰	Read and write	Consecutive	7
Illinois,	4-6	6-21	7-16	14-16	Full term	None	Sixth grade	Consecutive	7
Indiana,	4-6	6-21	7-16	14-16	Full term	None	Elementary grades ¹¹	Consecutive	6
Iowa,	...	5-21	7-16	14-16	120 days	Elementary grades	Not stated	Consecutive	6
Kansas,	12-4-6	6-21	8-16	14-16	Full term ¹³	Elementary grades	Read and write	Consecutive	7
Kentucky,	...	6-18+	7-16	14-16	Full term	Elementary grades	Fifth grade	Consecutive	7
Louisiana,	...	6-18	7-14	None	140 days	Elementary grades	...	Consecutive	None
Maine,	4-	5-21	14-16	15-16	Full term	None	Sixth grade	Consecutive	7½
Maryland,	...	6-21	7-16	14-16	Full term ¹⁵	None ¹⁵	Not stated	Consecutive	10 7
Massachusetts,	...	Any age	7-16	14-16	Full term	None	Sixth grade	Consecutive	8
Michigan,	4-7	5-20	7-16	15-16	Full term	Elementary grades	Sixth grade	Consecutive	7
Minnesota,	4-6	15-21	8-16	14-16	Full term	Elementary grades	Elementary grades	Consecutive	5
Mississippi, ¹⁸	...	5-21	7-14	None	80 days	Elementary grades	...	Consecutive	4
Missouri,	5-6	6-20	7-16	14-16	Full term	Elementary grades	Elementary grades	Consecutive	8
Montana,	3-6	6-21	8-16	14-16	Full term	Elementary grades	Read and write	Consecutive	4
Nebraska,	...	5-21	7-16	14-16	120 days ²⁰	High school ²¹	Elementary grades	Consecutive	6
Nevada,	4-6	Any age	7-18	14-18	Full term	High school	Elementary grades	Consecutive	6
New Hampshire,	...	22-6-21	8-16	14-16	Full term	Elementary grades ²³	Elementary grades	Consecutive	9
New Jersey,	4-7	5-20	7-16	14-16	Full term	None	Fifth grade	Consecutive	9
New Mexico,	...	5-21	6-16	14-16	Full term	High school	Not stated	Consecutive	7
New York,	4-6	5-21	8-16	14-16	Full term	None	Sixth grade ²⁴	Consecutive	9
North Carolina,	-6	6-21	7-14	14-16	Full term	None	Not stated	Consecutive	6
North Dakota,	4-6	6-21	25-7-15	14-16	Full term	Elementary grades	Read and write	Consecutive	7
Ohio,	...	6-21	26-6-18	16-18	Full term	High school	Seventh grade	Consecutive	8
Oklahoma,	4-6	6-21	8-18	16-18	2½ of term	Elementary grades	Elementary grades	Consecutive	3
Oregon,	...	6-21	9-15	14-16	Full term	Elementary grades	Read and write	Consecutive	8
Pennsylvania,	4-6	6-21	8-16	14-16	Full term	None	Sixth grade	Consecutive	8
Rhode Island,	...	Any age	7-16	14-16	Full term	Elementary grades	Read and write	Consecutive	9
South Carolina,	4-6	6-21	8-14	None	80 days	None	...	Consecutive	3
South Dakota,	...	6-21	8-16	14-16	Full term	Elementary grades	Read and write	Consecutive	8
Tennessee,	...	6-21	7-16	14-16	Full term	Elementary grades	Not stated	Consecutive	None
Texas,	5-7	7-21	8-14	12-14	100 days	None	Fourth grade	Consecutive	6
Utah,	4-6	6-18	8-18	14-18	100 days ³⁰	High school ²⁹	Read and write	Consecutive ³¹	5
Vermont,	-6	32-6-18	8-16	14-16	170 days	Elementary grades	Elementary grades	Consecutive	8½
Virginia,	-6	6-20	8-14	14-16	Full term	Elementary grades ³³	Not stated	Consecutive	7
Washington,	4-6	6-21	8-16	14-16	Full term	Elementary grades	Not stated ³⁴	Consecutive	6
West Virginia,	4-6	6-21	7-16	14-16	Full term	None ³⁵	Sixth grade	Consecutive	7½
Wisconsin,	4-6	36-4-20	7-16	14-16	120 days ³⁸	Elementary grades	Elementary grades	Consecutive	8
Wyoming,	4-6	6-21	7-14	None	Full term	None	...	Consecutive	None

Foot Notes

- 1 Three months in cities.
- 2 Seventh grade for children 15 years of age.
- 3 Provided the child is over 14 years of age.
- 4 Or attend day school one-half day per day or a public evening school.
- 5 Three months to share in the distribution of the State school fund.
- 6 School officials by vote may admit to any school children over four years of age.
- 7 Children 14, 15, and 16 years of age must attend school 100 days if the eighth grade has not been completed.
- 8 School attendance is not required of children, 14 to 16 years of age, but if they work employment certificates are necessary.
- 9 Illegal to employ children under 14 years of age, but employment certificates may be issued to those 13 years of age or over.
- 10 Provided the child is over 15 years of age.
- 11 Children over 14 years of age, who have not completed the sixth grade, may be required to attend a part-time school for full-time work or a special full-time school.
- 12 Kindergartens are to be established for children, 5 to 7 years of age, upon proper petition in cities having a population of 18,500, or over.
- 13 Children, 14 to 16 years of age, must attend school 80 days per year.
- 14 If illiterate, 7-17.
- 15 Children 13 and 14 years of age must attend school 100 days per year. Children 15 years of age must do likewise unless they have completed the elementary grades.
- 16 For colored children 7 months, for white children 9 months.
- 17 The school board may exclude children under 6 years of age.
- 18 State-wide law, but any county can release itself therefrom by majority vote.
- 19 If such employed children have not completed high school they must attend a part-time continuation school.
- 20 Entire term in cities.
- 21 If a high school is maintained.
- 22 Only children 5 to 16 years of age are enumerated.
- 23 Provided children are 14 to 16 years of age.
- 24 For children 15 to 16 years of age; elementary grades for children 14 to 16 years of age. Officers issuing employment certificates examine children as to their ability to read and write.
- 25 Children must attend school until they have reached their seventeenth birthday if they have not completed the eighth grade.
- 26 Compulsory attendance age may be changed to 7 years by local school board.
- 27 Children, 16 to 18 years of age, if employed, must attend a part-time or evening school, in case such schools are maintained, unless they have completed the elementary grades.
- 28 All persons, 16 to 21 years of age, seeking employment at a machine must secure an age certificate stating that they are over 16 years of age.
- 29 Children, 16 to 18 years of age, and those under 16 who have completed the eighth grade shall attend high school 30 weeks per year unless lawfully employed. If employed, such children must attend a part-time school 144 hours per year. The compulsory attendance laws, as amended in 1905, exempts all children from school attendance who have "already acquired the branches of learning taught in the district schools." (Provisions are not conflicting if the district maintains a high school).
- 30 In cities 150 days, 50 of which shall be consecutive.
- 31 Consecutive for 10 weeks only.
- 32 Persons over 18 years of age are not to be excluded from school on account of age.
- 33 Completion of elementary grades exempts, if child is employed.
- 34 Children 14 years of age may obtain employment certificates if they have completed the eighth grade.
- 35 If a high school is maintained within two miles of pupil's home.
- 36 The school board may admit to school free of tuition persons 20 to 30 years of age.
- 37 14 to 17 years in Child Labor Laws.
- 38 Full term in cities of first class; 8 months in all other cities; 6 months in towns and villages.

states covered with "checkerboard" squares in the diagram make similar exemptions if the children have passed the age of 14 or 15. On the other hand, the states that are "crosslined" provide no educational exemption whatever.

The most commendable provision of all is found in the five states not colored or crosslined in any way on the diagram—states which exempt children only when they have completed a high school course, if a high school is maintained by the local school corporation.

In this connection there is a decided tendency to recognize the elementary school as the "high water mark" of minimum educational essentials. The great majority of the states have not yet seen fit to adopt the goal of high school graduation as the standard to which all capable child-

ren must rise. The fact that one public high school has been brought into existence at every sunrise for the past 30 years has great significance for education.

It will mean before long that every community will have its own high school and every child who is capable and willing will have an opportunity to secure a high school education. Even now every fifteenth school building is a high school building. It would not be unwise to prophesy that all the states will soon require all children who can profit therefrom, to attend high school. At present only 34 per cent of the children ever go to high school and only fourteen per cent graduate from a four-year course. The high school of the future will need to have a more universal appeal—a humanized and voca-

tional one.

Let us prefer another and more serious charge against our law makers. Why is so low an educational standard set for those who desire to leave school and go to work? Do you not know that the Nation is trying to eradicate its illiteracy? Louisiana, Mississippi, South Carolina, and Wyoming ask no questions of children over 14 years of age but permit them to enter employment regardless of their ability even to read and write.

The laws of Maryland, Virginia, North Carolina, Georgia, Tennessee, Iowa, New Mexico, and Washington are no better in this respect, since no educational standard whatever has to be met in obtaining an employment certificate.

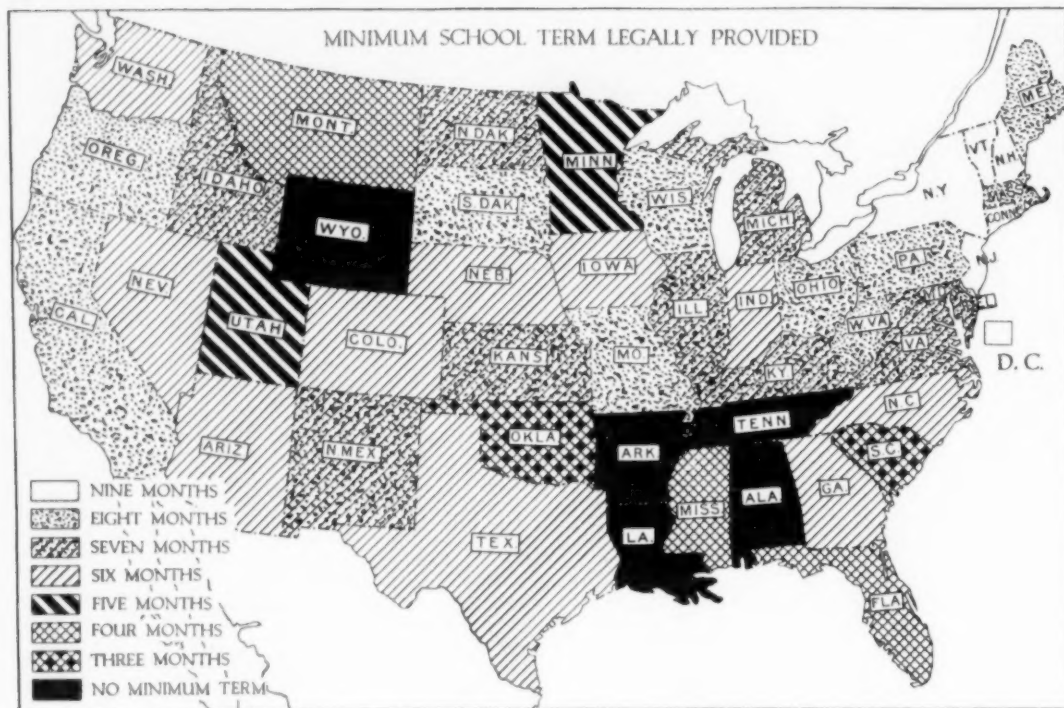


FIG. 5. THE MINIMUM SCHOOL TERM LEGALLY PROVIDED. PROVISIONS IN EFFECT JANUARY 1, 1923.

Such laws really encourage illiteracy instead of attempting to remove it. Thirteen states seem to have foreseen this criticism and have passed laws requiring children, who have reached the proper age and who desire to work, to be able to "read and write", thus barely removing them from the group of illiterates. These thirteen states are pictured in black in figure 4.

Conditions in Alabama, Arkansas, and Texas are but little, if any, better since the completion of the fourth grade is the educational prerequisite for labor permits. Only eleven states require candidates for employment certificates to have completed the elementary grades and not a single state requires high school graduation as a necessary condition. Ten states specify only the completion of the fifth, sixth, or seventh grade as a prerequisite to employment.

A Nation of Sixth Graders.

When children are allowed to "escape" from school with such a meagre educational achievement, is it any wonder that the average person by the time he reaches the age of 21 has gone to school only 1076 days? We are surely a "nation of sixth graders". It must not be ignored that many of these "excused" children, with such meagre educational equipment, are required to attend a part-time or continuation school, but such schools are not often maintained especially in the rural districts where the majority of the school children reside. Such provisions for continuation work are highly commendable and tend to raise the low standards just described.

Finally, let us ask our law-makers why they have not provided equal educational opportunities for all children. The history of their acts is plainly written in figure 5 and needs only to be scanned to be comprehended. It is a well known fact that the city school term is about nine months and that the rural term is only about seven months in length. A difference of two months, in educational opportunity is bad enough, but some children in the rural schools have a much shorter term. A few schools are even untaught each year, and certain children can never go to school at all.

How to Relieve the Situation.

The enactment of a law providing for a long minimum school term would relieve this situation. What have the legislators done about it? New York, New Hampshire, Connecticut, Rhode Island, and New Jersey all provide for a minimum term of nine months and are exoner-

ated from this charge. Vermont provides eight and one-half months and is not to be censured severely. Nine states have a minimum term of eight months; two states, of seven and one-half months; nine states of seven months; ten states of six months; two states of five months; three states of four months; and two states of only three months.

In the five states of Alabama, Arkansas, Louisiana, Tennessee, and Wyoming there is no minimum school term. Here it is wholly satisfactory to the legislators for certain children to have no school advantages whatever. Children may be born equal so far as political and religious liberty are concerned but they are surely born with unequal educational opportunity. It is quite apparent from such legal provisions as these that certain children living in the rural districts are going to be cheated out of their right to a public school education. For this neglect the state may expect eventually to suffer by having on its hands a class of people unable to compete successfully with the educated class.

The school term in South Carolina is 110 days, whereas that in New Jersey is 189 days. Do you mean to argue that the children in South Carolina have equal advantages with those in New Jersey? The State of Vermont is turning out eighteen times as many high school graduates as South Carolina in proportion to its population of high school age. If present conditions continue, what will be the status of education in Vermont and in South Carolina 20 years hence? I am pleading for equal opportunity for all children to acquire an education and am asking that legislators weigh with the utmost care the questions I have raised and that they revise their attendance laws so as to secure more regular attendance, to keep children longer in school, and to use judiciously the money provided for public education.

MR. SNYDER RETIRES.

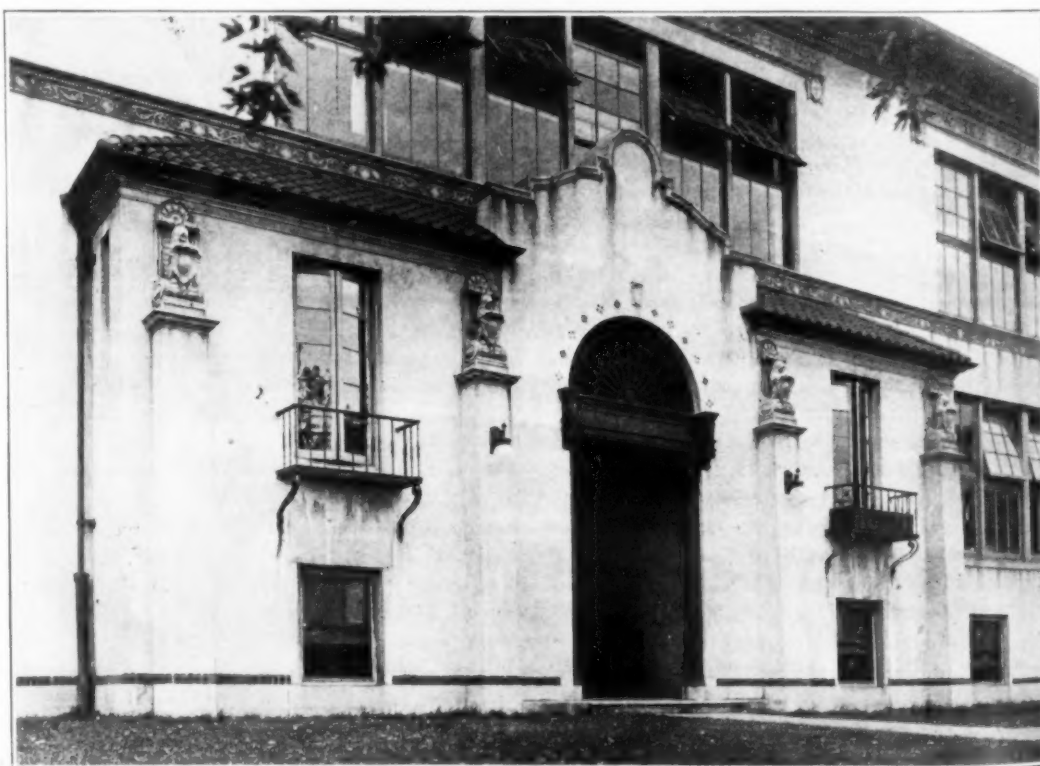
Mr. C. B. J. Snyder, on January 10th, retired from the office of Superintendent of School Buildings of New York City, after more than 31 years of service in the school system. President George J. Ryan of the board of education and Supt. W. L. Ettinger paid Mr. Snyder a tribute of appreciation for his work and Mr. Ettinger recommended to the board that Mr. Snyder be elected Superintendent of School Buildings-Emeritus. In a communication to the board, Mr. Ettinger wrote:

"His contributions to the school system and to our city are found in the beautiful school buildings that adorn our several boroughs. They embody careful planning, the matchless technical skill, and the fine regard for architectural beauty which were the flower of Mr. Snyder's genius. As was said of Sir Christopher Wren, if you would see his monument look about you."

"Whether or not it is possible for the board of education to avail itself of the experience and ability of Mr. Snyder in the capacity of superintendent of school buildings emeritus, I know not; but such a plan, if possible, would be due recognition not only of his high architectural skill but also of his ardent devotion to the school system which he loved to serve."

—Mr. E. L. McCune, for nearly four years clerk of the board of education at Columbus, O., has resigned. The action followed the adoption of the revised rules of procedure which places the clerk of the board under the authority of the general manager.

—Miss Edna L. Hice has been elected clerk of the board at Boise, Ida., succeeding Charles S. Kingsley.



DETAIL OF FRONT ENTRANCE, ELMORA SCHOOL, ELIZABETH, N. J. C. G. Poggi, Archt., Elizabeth. (See Page 64)

Intelligent Buying by School Boards

Thos. W. Vinson, Chicago, Illinois.

In the business world today, the man who knows and does one thing well is the man most likely to succeed. We are rapidly becoming a nation of specialists. But to be a successful school board member, one should know something about a great many things. However, in the successful operation of the schools, the school board member must depend upon the knowledge and experience of his co-workers and employees for the performance of many duties. Such matters as the course of study, selection of teachers and other technical duties must of necessity be turned over to the superintendent and the supervisors.

But there is one duty for which the school board member must very largely depend upon his own knowledge and business ability—the construction and equipment of school buildings. It is highly important to have the proper kind of building and is equally important that it have the proper equipment. The materials with which the teachers work, the supplies and equipment in the modern school play an ever increasing part in the successful operation of the school.

Any good citizen may well be proud when his fellowmen select him as a member of the school board because he holds in his hand the destiny of the nation's most precious asset—her children, her future citizens. It is a position which touches the heart, the home, and the pocketbook of every citizen of the community. The future success or failure, for a life time, of hundreds of children may and often does depend upon the honest and efficient operation of the schools through the board of education.

The schools are the biggest and surely the most important business of any community and if they are to function efficiently they must have the guiding hand of the best business men in the community. Business enthusiasm, business energy and business integrity are just as important in the operation of the schools as in any private business and the man who accepts a school board membership should do so with no other idea than to give his time, energy and ability unselfishly to the community which he is to serve.

Too many school board members do not realize the responsibility which rests upon them. Too often they think of the privilege or the prestige or the business asset of the position without much thought of their obligation to the public. It does not occur to really successful business men—men of large affairs, that when selected as school board members, it is their duty to apply the same business principles, tact, energy and enthusiasm to school board matters that they apply to their own personal business.

We wish to commend a plan which is used by a number of cities, whereby a special committee is appointed on building and grounds, this committee to include the superintendent and business manager or purchasing agent. The committee, which is permanent, is supposed to make a careful study or survey of the particular needs of the school with reference to its proper and harmonious equipment. They call into consultation the principals and special teachers of the schools to discuss the utility, character and purposes of the equipment to be purchased. In all cases the future growth of the city, the probable increase in attendance, the possibility of changes in methods of instruction, the desires of the community as to course of study, the effect of new discoveries or inventions upon the knowl-

edge to be imparted or upon the equipment to be used, must have the most careful study and consideration.

In addition to the selection of the building architect it is often necessary to select an equipment specialist who has made a special study of such lines as laboratory furniture, manual training and domestic science equipment, with special reference to the pedagogical or scientific use of such equipment. Some of the larger manufacturers of this character of goods have special architects who have made a lifetime study of it and who may be called into consultation whenever the committee may have reason to believe that specially built equipment is necessary. As a rule, very few building architects have made a special study of this kind of equipment and are not skilled either in its use or construction.

The Bidding System.

The so-called bidding system which is in vogue in many sections of the country, though apparently fair and just has been a very great detriment to the right kind of buying. Many boards of education have an idea that they save a great deal of money by advertising for bids, then taking advantage of the cheapest product offered. The bidding system may work well enough for the purchase of standard, trade-marked articles, but it is often very harmful, when applied to the purchase of the full school equipment.

A great many intelligent members of school boards, as well as most manufacturers and distributors of school furniture, would like to see buying by bids done away with entirely. It was always of doubtful value even when business houses were far from their present high standard of efficiency. In the purchase of their own supplies, business houses no longer resort to the old-fashioned method of buying by bids, which is retained by so many school boards. If this obsolete system merely took up a lot of time and in the end resulted in the school getting the finest possible equipment at the lowest possible price, it might be excusable, but it doesn't even do this.

The present method is (a) old-fashioned, (b) time-consuming, (c) wasteful, (d) unjust. The sooner it is displaced by a fair, square, economical, business-like plan, the better it will be for all concerned.

It should be made just as easy for a school board to buy any or all of its equipment as it is for a man to buy a hat. If Jones wants a Stetson hat, he goes in and gets it. If Smith prefers a Knox, he buys that brand. And Robinson, to whom neither of these makes appeal, buys a hat of another manufacture.

No man in ordinary business life starts out to buy any article of wearing apparel, machinery for the farm or household furniture by asking for bids and then accepting the lowest bid regardless of the make or brand or utility of the article. In other words, there is no other line of business transacted according to the old-fashioned methods used by boards of education.

The results of such a system are bound to result in the cheapening of the goods. The lowest bidder will aim to make the best possible showing in the matter of price regardless of the utility or endurance of the article he offers. The School Children of America deserve the best there is to be had. The matter of character building and the training of children to meet the big problems of life are too important to permit of any interference by poorly selected or

cheap material with which they are to be trained.

How the System Works.

In many cases, boards of education invite a large number of salesmen with samples when they have practically made up their minds to buy a certain type of equipment and have no serious intention of considering anything else. Our attention has recently been called to a letting in one of the middle western states where some thirty or forty salesmen, representing various lines of equipment, were kept in the city for many days when the members of the board were definitely committed to buy the equipment through some local dealer regardless of price. One of the members of the board of education made the remark after the contract was let that they had "done the town good by giving the hotels and business houses some trade."

In another letting in a large city where several hundred items were to be bought, the board of education spent more than three days listening to salesmen demonstrating the lines of equipment which they had to offer. The board had permitted an "expert" from the architect's office to take charge of all purchases for the board of education. What method did this gentleman follow? Did he go about things in a businesslike way? He certainly did not!

All bids were opened, covering everything from the grading of the school grounds clear through to the most minute item of equipment. Then Mr. "Expert" began his buying. He directed the first salesman to begin and had him explain the merits and demonstrate by sample everything he had to sell. Beginning with steel lockers, he went right down the line, covering school desks, opera chairs, folding chairs, domestic science equipment, manual training benches, and laboratory furniture.

The board sat, looked and listened.

Salesman Number Two was next invited to appear before the Board and he was heard in the same way, except that he began with school desks and ended with lockers.

The board sat, looked and listened.

Then Representatives Numbers Three, Four, Five, Six, and so on, were heard, until about thirty salesmen in all had explained and demonstrated everything from kindergarten material to laboratory furniture.

The board sat, looked and listened.

The decision had to be made and upon the advice and with the assistance of the architect's "expert," it was made. But did it—could it—mean anything after such a method had been pursued? How much did any member of the school board, the superintendent, or even the architect himself, know about each piece submitted, at the close of such a seance?

It is doubtful if any one of the purchasers could have picked out a single part of the equipment and given the name of the firm offering it or the price at which it was quoted.

What had the school board purchased? Did they really know whether they had bought the most suitable, the most up-to-date equipment, and paid the right price?

They did not—they could not.

The Architect's Part.

There has been a tendency in recent years by some boards of education to have the building architect prepare the plans and specifications for the laboratory furniture, domestic science and manual training equipment. The intimate relationship which exists between the architect and the board of education makes it an easy matter

for the shrewd architect to convince the Board that special made furniture such as he would design is necessary for the proper and harmonious equipment of the building. He does not work with the members of the Board very long until he ingratiates himself into their favor to such an extent that he can secure almost any concession from them that he desires and it is perfectly natural that he should want the additional remuneration for this service.

It is, therefore, quite possible that the demand for specially built and necessarily high priced equipment comes from the suggestion of the architect rather than from any real necessity of the school or desire of the Board of Education. Of course, his motives may be of the highest and he may be sincere in giving his best services to the Board of Education. However, sincerity isn't all—knowledge is equally necessary.

Of course, a real business man on a board of education, when he stops to consider the matter, will understand that a building architect cannot possibly specialize on such important equipment. How can an architect design equipment of the merit and usefulness of houses who have made such manufacture a life study? Take the large number of high-class concerns who have been making laboratory furniture, domestic science and manual training equipment for many many years. Their knowledge of the uses and purposes of this character of equipment far exceeds that of the average building architect. It must, of necessity.

When there are one or two good business men on the board of education, with the assistance of the superintendents and principals, they should have no trouble in selecting the kind of equipment which is best suited to the needs of the school and the purposes for which it is intended. We would rather risk the judgment of the superintendent in the selection of most equipment, and especially the judgment of the special teachers in the selection of special equipment, than that of any architect. Furniture and equipment must be selected to meet the necessities of the course of study and the many other technical needs of the school, and for this reason, special teachers and superintendents are far better equipped for this important duty than the architect.

A Business Man On the Board

In one of our large southern cities, a new board of education was elected a few months ago. Prior to the election of this board, the financial affairs of the board of education had not been handled in a businesslike way. There had been much criticism of the methods and tactics previously used by the board of education, not only in the building and the equipment of the schools, but in the employment of teachers and various other matters. Charges had been made through the newspapers that certain members of the board of education had used the office for personal profit and that large contracts had been handed out to friends without any thought of or care for the interests of the public or the schools.

It so happened that one of the most successful business men in the city had been selected as a member of the new board, whose first duty was the purchase of equipment for a new \$500,000 high school building. Considerable wire pulling had been carried on by some members of the board of education, who thought that the same methods would be followed in the purchase of this equipment as had been followed by the previous board.

We shall call the business man on the board, John Jones. His skill in buying was as great as his sales and executive ability. These qual-

ities in his make-up were largely the cause of his business success.

The meeting for the purchase of the equipment was called to order. The routine work had been disposed of. The president of the board announced the next order of business which was the purchase of furniture for the new building.

John Jones knew most of his colleagues were going to be influenced by the high-paid architect, who, while undoubtedly skilled in design and construction and had erected a splendid high school building, was woefully ignorant of seating equipment for either classroom or laboratory and knew even less of the other thousand and one things used by the modern school.

"Mr. Chairman," he said, "the equipment of this beautiful new building is not only for this generation but for those that follow, and it should be handled like any other good business transaction.

"I suggest that we give every salesman a fair chance to demonstrate and explain the merits of his goods. And with due respect to our friend, the architect, (bowing to that gentleman), I propose we leave him out of the deal entirely.

"So that this transaction may be fair and square to everybody, I make the following motion:

"1. That four weeks' notice be given of our intention to buy;

"2. That ten days' notice be given of the letting date;

"3. That every bidder on the same line of equipment have exactly the same time for his demonstration;

"4. That each sample submitted be held by the board of education as a part of the order and that the goods when selected shall be equal in every respect to the sample;

"5. That the board take up each item of equipment separately, that the demonstration be heard on it and that selection of it be made before the next item is taken up;

"6. That the board do away with the previous plan of requiring a certified check filed with the bid and instead thereof each successful bidder be required to furnish bond in a sufficient amount to guarantee that his part of the contract will be carried out;

"7. That the names of all bidders on the larger and more important lines of equipment, together with their bids on each item, be made public;

"8. That the board invite the opinion of the heads of the various departments and special teachers as to the desirability and practical use of all technical equipment to be purchased;

"9. That the quality, durability and usefulness of the article receive first consideration so that the building shall be equipped in keeping with its architectural beauty, and that the price of the goods be made a second consideration;

"10. That the superintendent of schools, the principal of the high school, and the chairman of the building and grounds committee be appointed a special committee to make an investigation as to the needs of the school in the way of technical training equipment, with power to call for assistance from at least two large manufacturers of such equipment and that they make a report with recommendations to the Board within a reasonable time."

With this bombshell, John Jones, sat down. Then followed, as may be supposed, the most tumultuous scene that community ever had witnessed.

The thought of injecting real business methods into the purchase of equipment for the

new school building was unheard of in that community. However, the motion was so fair, reasonable and just that no member of the board, be he ever so willful minded, could oppose it. The motion prevailed and the new plan was carried out to the letter.

As a result, this southern high school building has an equipment which is the envy of any city in this country, and the beauty of it is that it was bought at a saving of at least ten per cent from prices paid by most schools at that particular time. The school board in this city is proud of its achievement, the pupils have the finest and most suitable equipment that can be secured, and the principal and teachers have the best tools with which to work. The community has a high school second to none and the salesmen who represented the various concerns are all satisfied because they received a "square deal," consequently, they "went the limit" in the matter of giving service.

The architect was also happy because he got the prestige and reputation for the construction of the fine school building which was the pride of the entire community. It is true that he lost his percent in the purchase of the equipment, but he gained a valuable lesson by watching the activities of a real business man on the board of education.

What We Think of This Plan.

We commend the provisions of the motion by John Jones almost without an exception as fair, honest and just.

We believe the board of education should always retain the sample as a part of the order.

We especially commend the plan for omitting a certified check and requiring a bond to be filed for the performance of the contract.

The above plan by John Jones appears to us to be businesslike and to be the only sensible and just course to pursue, provided the bidding system is followed.

The Certified Check Evil.

Many boards of education do not realize what a hardship it is to require bidders to file certified checks for a certain per cent with each bid. Our attention was called, some months ago, to the fact that one school supply house whose capital stock was only \$100,000 had certified checks to boards of education outstanding in the sum of \$65,000. Some of these checks were held for a period of three months. More than two-thirds of the capital of this concern was tied up in a way which benefited no one and which did not serve a single purpose except to permit the bank where the money was held to have the use of it for that period of time without interest.

When a contract is made for the purchase of equipment, we can readily understand how the board of education would want the contract filled according to all terms thereof. In such cases, it is perfectly natural and right to require the bidder to furnish a bond for the performance of said contract. When large sums of money are tied up in certified checks before the contract is let, there is a distinct loss to some one. It is natural that the board of education will eventually be compelled to pay for this overhead expense. The sooner boards of education abolish this unnecessary expense, the better it will be for all concerned.

Letting Dates Postponed.

Our attention has been called in recent months to a custom which has been followed by a few boards of education, in which the board will advertise for bids and set a date for the purchase of equipment. A number of school supply houses will go to the trouble and expense

(Concluded on Page 135)



CAPITOL HEIGHTS JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.

Consolidating the Schools of an Entire County

A. F. Harman, County Superintendent of Education, Montgomery County, Alabama.

The rural schools of Montgomery County, Alabama, present an interesting illustration of consolidation on a complete county-wide basis. The illustration is all the more striking in the light of educational conditions obtaining in the county as recently as 1916. At that time there was not one brick schoolhouse in the entire county outside of the city of Montgomery. There was no school outside the city of Montgomery devoted exclusively to high school work. There were but four schools of three or more teachers and no school of more than four teachers. There were thirteen two-teacher schools and 30 one-teacher schools, many of the latter scarcely more than family groups presided over by governesses. These 30 isolated one-teacher schools patronized by a complacent, individualistic people were as fixed in the minds and hearts of the people as any 30 one-teacher schools could possibly be. The administrative and supervisory force consisted of a superintendent without clerical help. There was no sanitation. Let this story be drawn out indefinitely to represent the worst conditions existing anywhere in the rural districts and they can be no worse than the conditions in Montgomery County when its educational rebirth occurred.

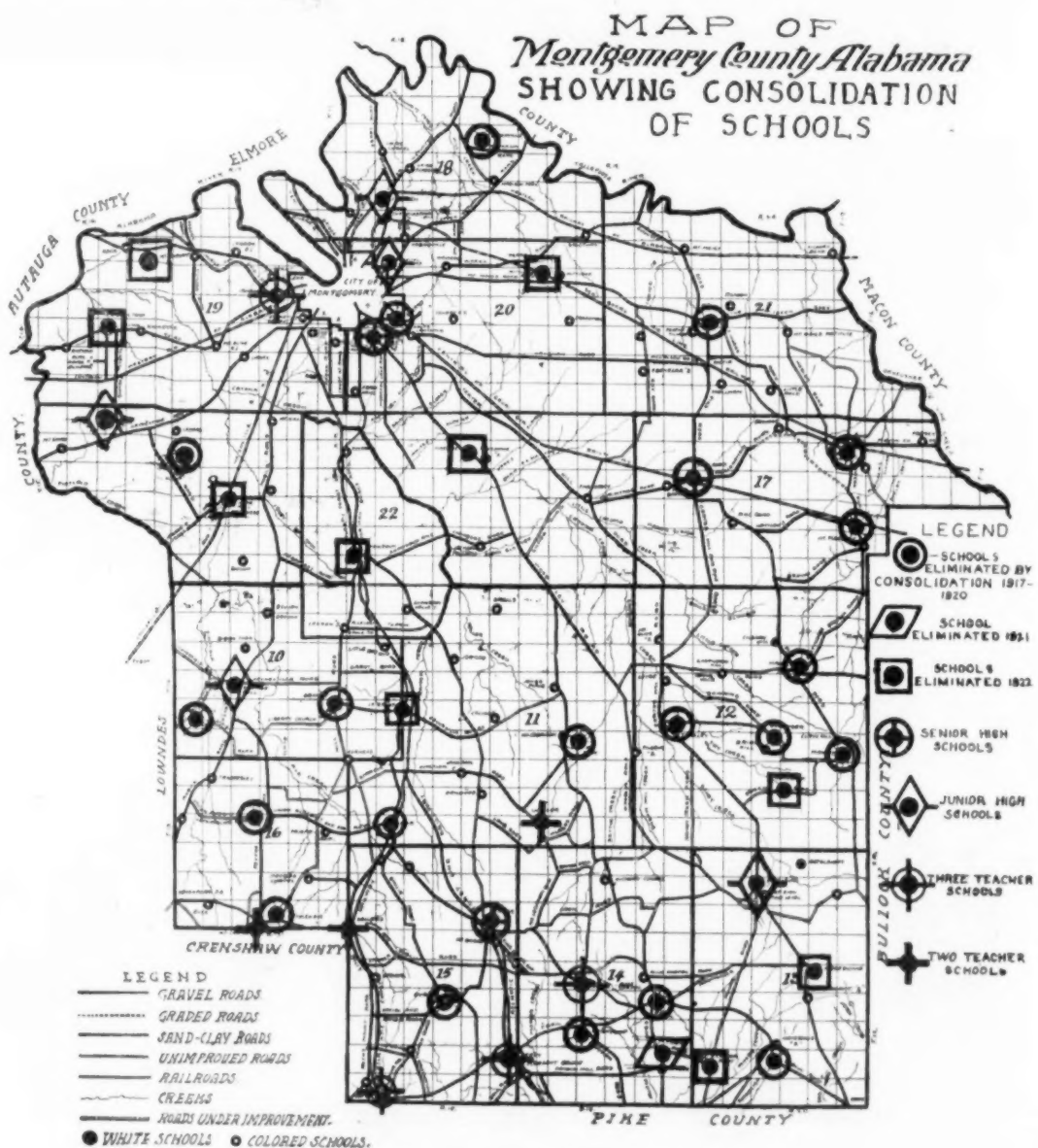
At the elections in November, 1916, under the educational leadership of Honorable William F. Feagin, then state superintendent of education, the people of the state amended their constitution enlarging their taxing powers for public education. Out of these enlarged taxing powers came Montgomery county's educational awakening. On October 1, 1917, Mr. Feagin voluntarily relinquished the office of state superintendent of education to become superintendent of education of Montgomery county, bringing to the county the prestige and the enthusiasm and the vision of his statewide experience. Quickly thereafter the people of the county voted to levy for a period of ten years an additional school tax of three mills. And in quick succession came the adoption of a program for consolidation and for buildings. Out of this program have come the following developments:

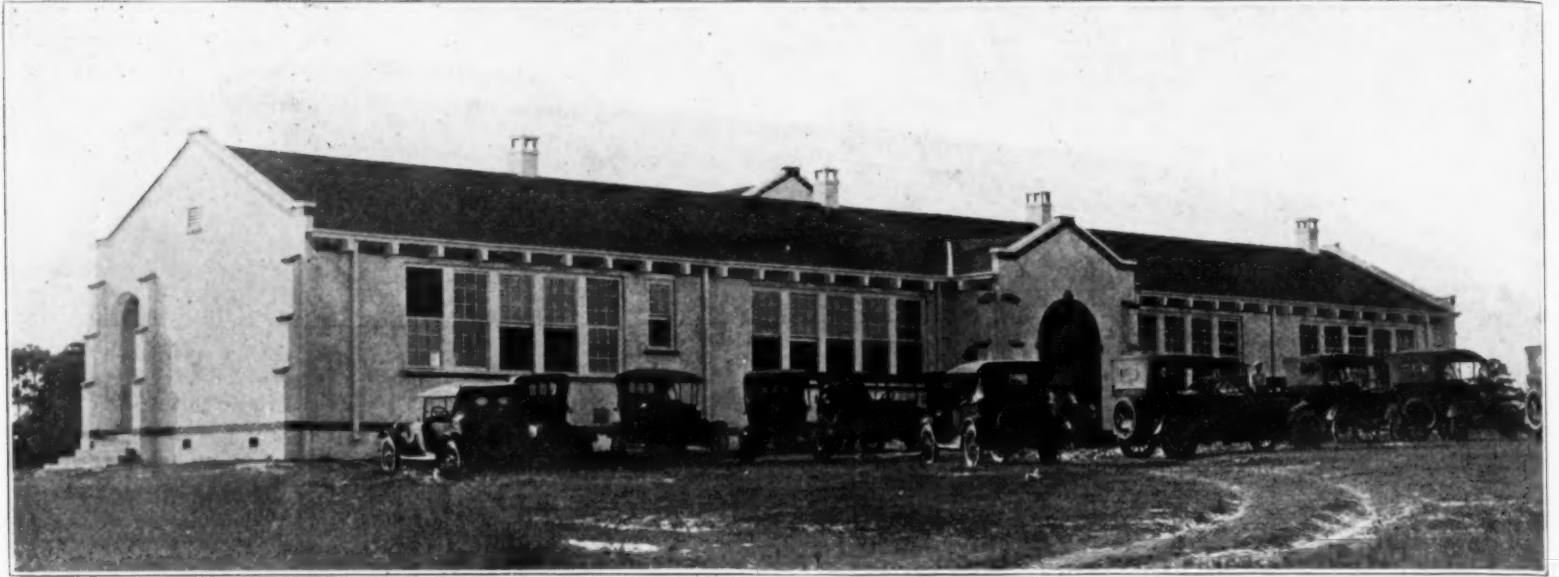
School Buildings.

At the beginning of the year 1922-1923 the rural and suburban schools under the authority of the Montgomery county board of education are being conducted in fifteen buildings. Of these fifteen buildings twelve are brand new or

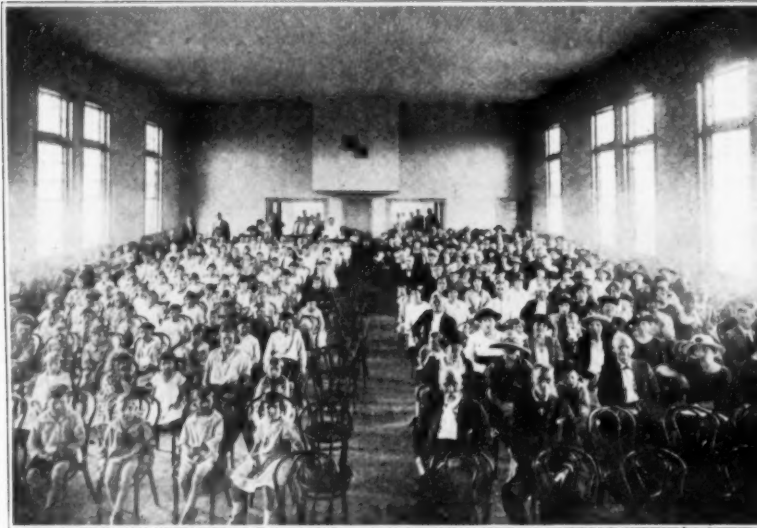
have had substantial additions placed to them during the year ended September 30, 1922. The three two-teacher schools and two of the three-teacher schools are frame structures. Of the ten other schools four are constructed of brick and six of stucco on hollow tile. Accompanying illustrations will show the beauty and the permanent character of the buildings. It must be re-

membered that with the exception of the suburban schools located at Capitol Heights, Chisholm, and Cloverdale, the schools of Montgomery County are located in the open country and attended by strictly rural children. The suburban schools are attended also by goodly numbers of children from the country who are transported at public expense.

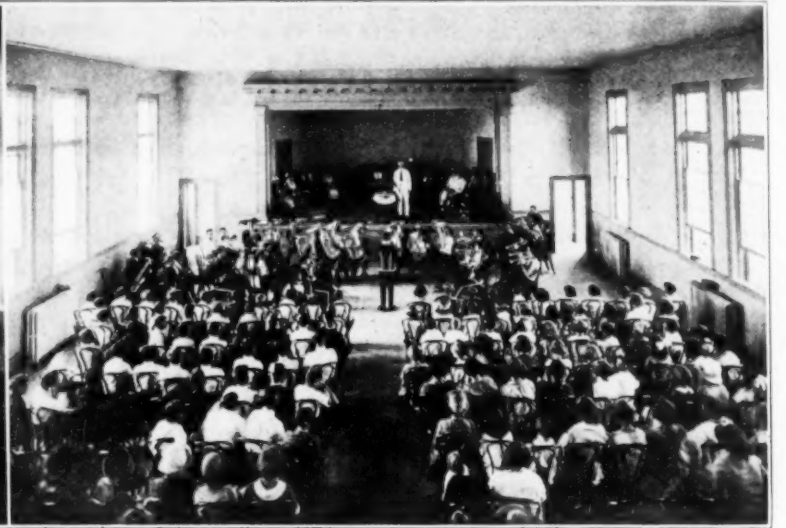




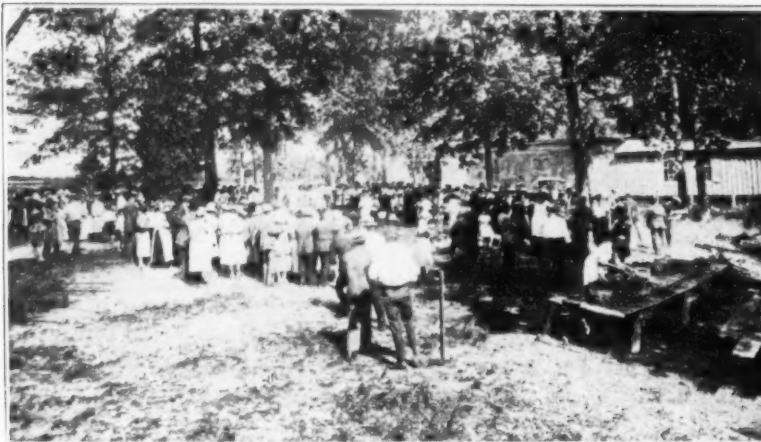
GRADY ELEMENTARY SCHOOL, MONTGOMERY COUNTY, ALABAMA. A TYPICAL CONSOLIDATED SCHOOL.



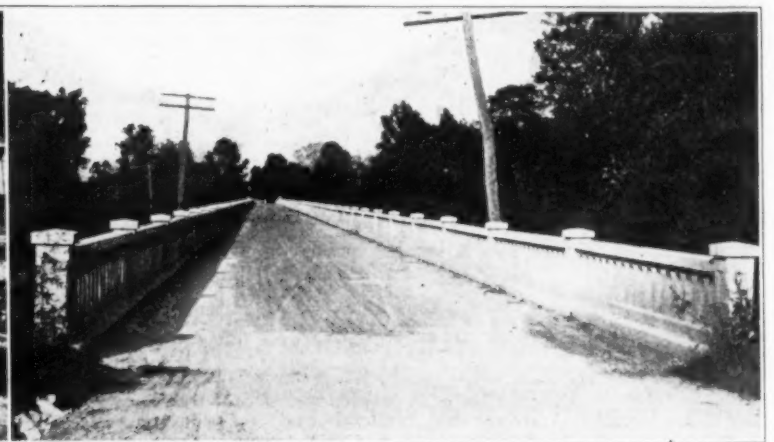
DEDICATORY EXERCISES, PINE LEVEL JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.



CATOMA JUNIOR HIGH SCHOOL DEDICATORY EXERCISES, MONTGOMERY COUNTY, ALABAMA.



"DINNER ON THE GROUNDS" DEDICATION OF THE PINTLALA JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.



MEMORIAL BRIDGE, MONTGOMERY COUNTY, ALABAMA. TYPICAL OF ROAD CONDITIONS WHICH MAKE PUPIL TRANSPORTATION EASY.



PIKE ROAD CONSOLIDATED SCHOOL, MONTGOMERY COUNTY, ALABAMA. CHILDREN ARE HAVING PHYSICAL EXERCISES UNDER DIRECTION OF TEACHERS. NOTE THE WELL KEPT MACADAM ROADS.



CHISHOLM JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA. THIS BUILDING IS TYPICAL OF THE JUNIOR HIGH SCHOOL BUILDINGS.

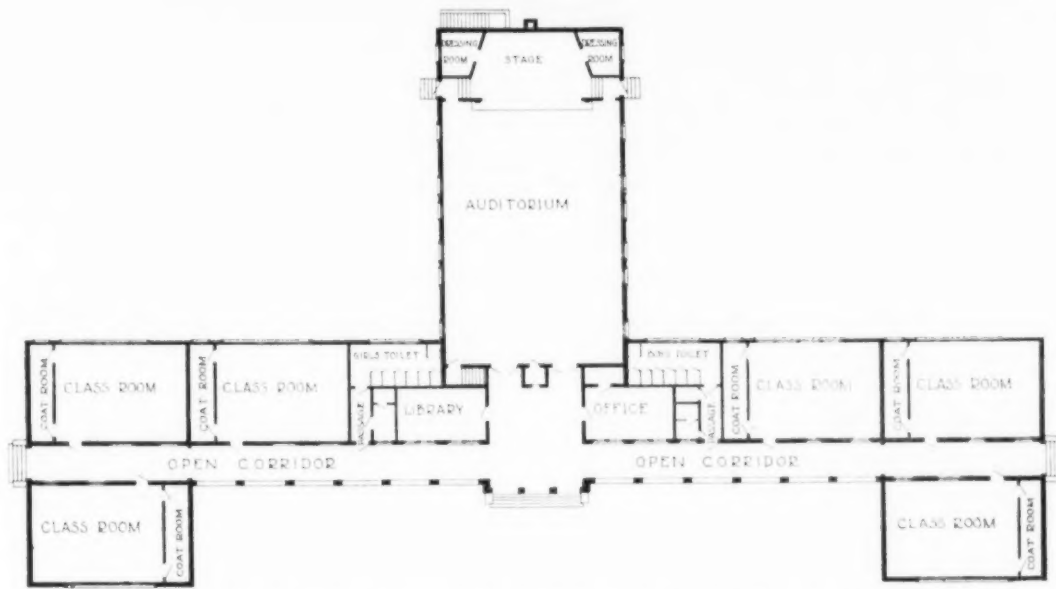
As compared with other counties in the United States, the total investment in school buildings, grounds, and equipment, may not be large. Conservatively estimated the county has seven hundred fifty thousand dollars invested in its school plants. But the county is sparsely settled; the total school population is small; and the per capita investment, either on a basis of persons of school age or on a basis of school enrollment must be striking, amounting to \$225 on the former basis and to \$280 on the latter basis. The buildings, grounds, and equipment of the consolidated schools range in value from twenty thousand dollars to one hundred fifty thousand dollars each.

The school sites constitute an interesting part of the county's educational development. With the exception of two of the smaller schools and also two of the suburban schools the school grounds range in area from ten to 83 acres. The fifteen schools are on sites totaling 405 acres or an average of 27 acres for each school. With a single exception, the sites for the schools have been given by the people of the communities in which the schools are located. The program for the county provides for the locating and maintaining on the school lands of principals' homes, teachers' homes, school farms, extensive athletic fields, playgrounds, and parks. Already there are teachers' homes in connection with the schools at Pike Road and Ramer, the first schools to be erected. A school farm project is well under way at Pike Road.

Park projects are being conducted in the way of conserving and promoting native trees and shrubbery.

Still another interesting feature of the county's educational development is the methods whereby the building program has been financed. On July 1, 1920 when the present superintendent assumed office, in addition to the county-wide school tax, a three-mill tax had been voted in Montgomery County School District, Number One, a large district comprising three beats or approximately two hundred square miles.

There were outstanding against the county school tax six per cent warrants amounting to \$150,000 and non-interest bearing notes amounting to \$10,000. The funds arising from these taxes could bear no further strain. The county board of education appealed to the county board of revenue. So far as we know or can ascertain the county board of revenue set a precedent by calling an election May 10, 1921, at which time the people of the county, the electors of the city of Montgomery participating, voted overwhelmingly to levy bonds in the amount of \$300,000 for rural and suburban school buildings, these bonds to be a lien upon the general revenues, not the school revenues, of the county, the contention being that school buildings are public buildings in the same sense as roads, bridges, court-



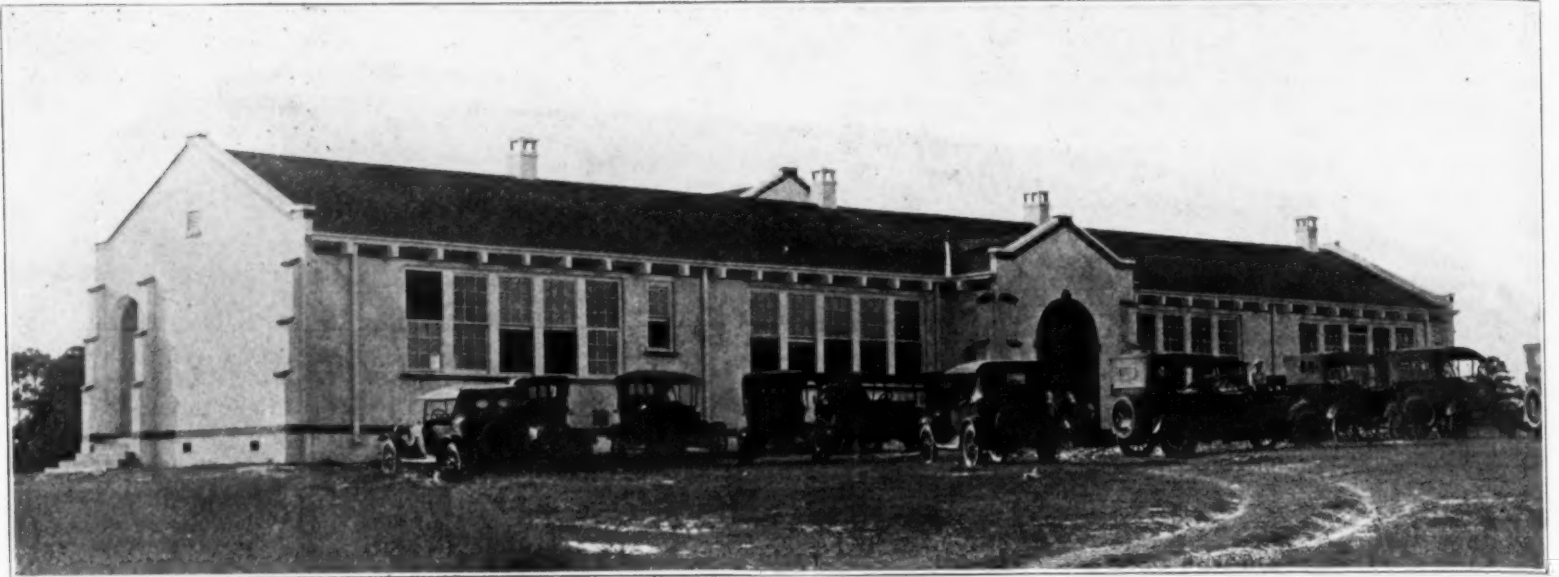
FLOOR PLAN OF THE CATOMA JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.



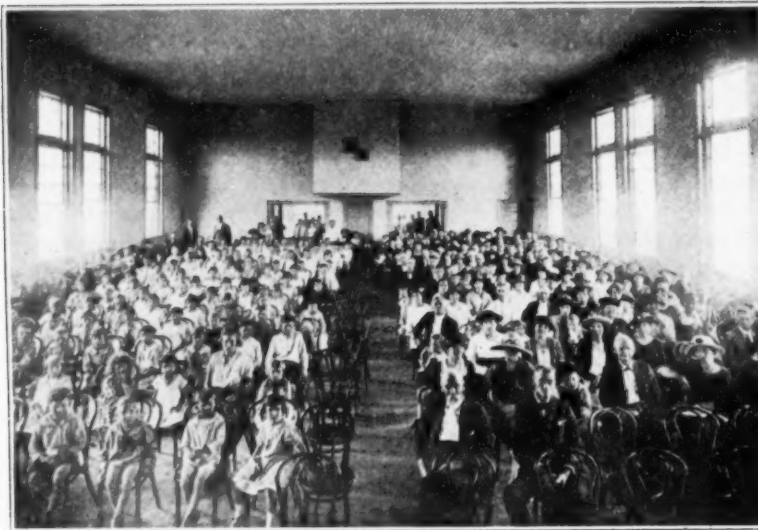
PRINCIPAL'S AND TEACHERS' HOME, PIKE ROAD CONSOLIDATED SCHOOL, MONTGOMERY COUNTY, ALABAMA.



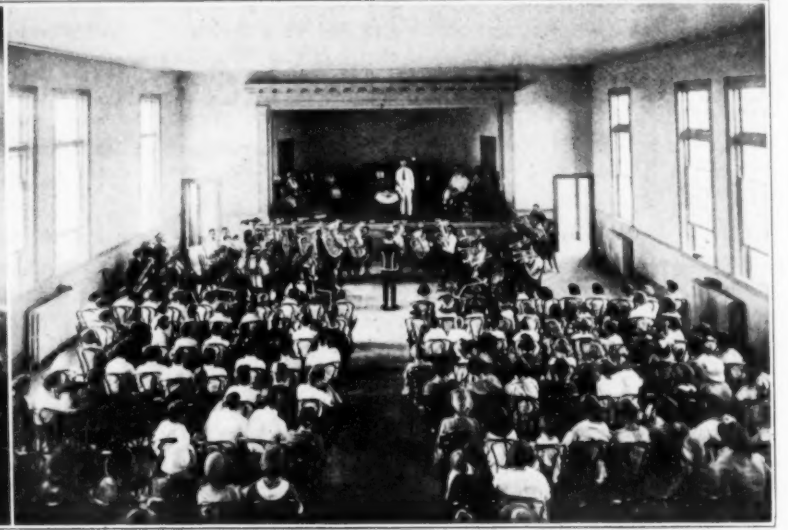
CAPITOL HEIGHTS JUNIOR HIGH SCHOOL, SUBURBAN TO CITY OF MONTGOMERY, UNDER JURISDICTION OF COUNTY BOARD OF EDUCATION.



GRADY ELEMENTARY SCHOOL, MONTGOMERY COUNTY, ALABAMA. A TYPICAL CONSOLIDATED SCHOOL.



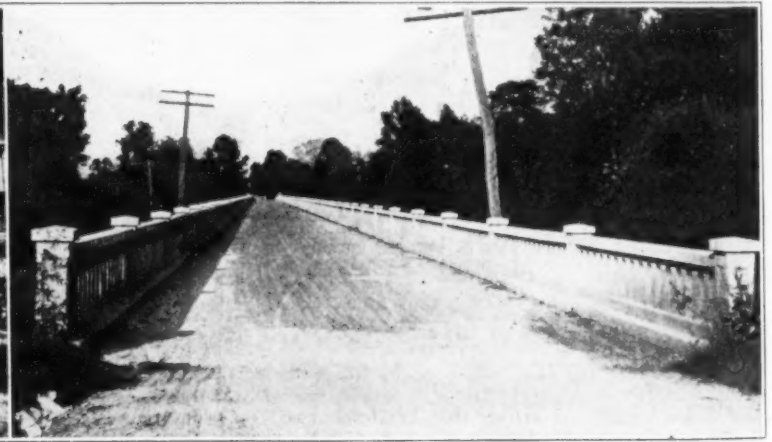
DEDICATORY EXERCISES, PINE LEVEL JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.



CATOMA JUNIOR HIGH SCHOOL DEDICATORY EXERCISES, MONTGOMERY COUNTY, ALABAMA.



"DINNER ON THE GROUNDS" DEDICATION OF THE PINTLALA JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.



MEMORIAL BRIDGE, MONTGOMERY COUNTY, ALABAMA. TYPICAL OF ROAD CONDITIONS WHICH MAKE PUPIL TRANSPORTATION EASY.



PIKE ROAD CONSOLIDATED SCHOOL, MONTGOMERY COUNTY, ALABAMA. CHILDREN ARE HAVING PHYSICAL EXERCISES UNDER DIRECTION OF TEACHERS. NOTE THE WELL KEPT MACADAM ROADS.



CHISHOLM JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA. THIS BUILDING IS TYPICAL OF THE JUNIOR HIGH SCHOOL BUILDINGS.

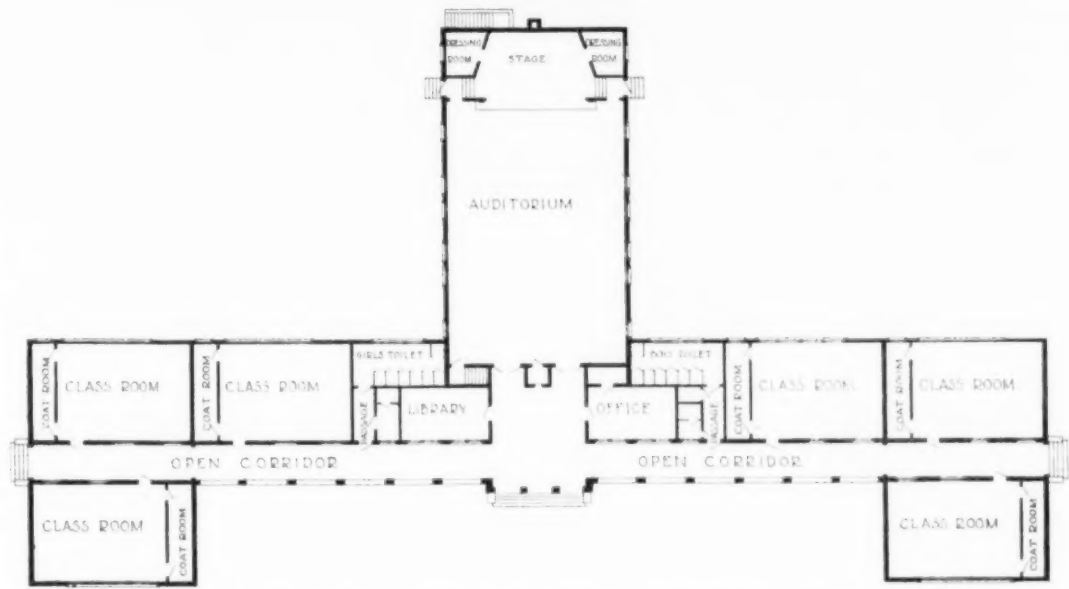
As compared with other counties in the United States, the total investment in school buildings, grounds, and equipment, may not be large. Conservatively estimated the county has seven hundred fifty thousand dollars invested in its school plants. But the county is sparsely settled; the total school population is small; and the per capita investment, either on a basis of persons of school age or on a basis of school enrollment must be striking, amounting to \$225 on the former basis and to \$280 on the latter basis. The buildings, grounds, and equipment of the consolidated schools range in value from twenty thousand dollars to one hundred fifty thousand dollars each.

The school sites constitute an interesting part of the county's educational development. With the exception of two of the smaller schools and also two of the suburban schools the school grounds range in area from ten to 83 acres. The fifteen schools are on sites totaling 405 acres or an average of 27 acres for each school. With a single exception, the sites for the schools have been given by the people of the communities in which the schools are located. The program for the county provides for the locating and maintaining on the school lands of principals' homes, teachers' homes, school farms, extensive athletic fields, playgrounds, and parks. Already there are teachers' homes in connection with the schools at Pike Road and Ramer, the first schools to be erected. A school farm project is well under way at Pike Road.

Park projects are being conducted in the way of conserving and promoting native trees and shrubbery.

Still another interesting feature of the county's educational development is the methods whereby the building program has been financed. On July 1, 1920 when the present superintendent assumed office, in addition to the county-wide school tax, a three-mill tax had been voted in Montgomery County School District, Number One, a large district comprising three beats or approximately two hundred square miles.

There were outstanding against the county school tax six per cent warrants amounting to \$150,000 and non-interest bearing notes amounting to \$10,000. The funds arising from these taxes could bear no further strain. The county board of education appealed to the county board of revenue. So far as we know or can ascertain the county board of revenue set a precedent by calling an election May 10, 1921, at which time the people of the county, the electors of the city of Montgomery participating, voted overwhelmingly to levy bonds in the amount of \$300,000 for rural and suburban school buildings, these bonds to be a lien upon the general revenues, not the school revenues, of the county, the contention being that school buildings are public buildings in the same sense as roads, bridges, courts-



FLOOR PLAN OF THE CATOMA JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.



PRINCIPAL'S AND TEACHERS' HOME, PIKE ROAD CONSOLIDATED SCHOOL, MONTGOMERY COUNTY, ALABAMA.



CAPITOL HEIGHTS JUNIOR HIGH SCHOOL, SUBURBAN TO CITY OF MONTGOMERY, UNDER JURISDICTION OF COUNTY BOARD OF EDUCATION.



CATOMA JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA. Okel and Cooper, Architects, Montgomery, Alabama.

houses and jails. Recognizing this contention the county board of revenue has since issued short term warrants in the amount of \$62,000 for the completion of the county's school building program. On January 3, 1922, all that part of Montgomery county outside the city of Montgomery and outside School District Number One, having been constituted a school district for taxing and all other school purposes, voted to levy an additional school tax of three mills for the further promotion of the county's educational system. With the funds arising from the above sources the establishment has reached its present status. Outside the city of Montgomery there are in Montgomery county two school districts—one comprising a territory of two hundred square miles and one a territory of approximately 581 square miles.

There is one large consolidated school in District One. The remaining fourteen schools are all in District Two and are operated under rules and regulations as flexible as those of any city system. School taxes in Alabama are levied in cycles, state, county, and district, in the order given. In Montgomery county the cycles are complete—a convincing tribute to the county-wide consolidation scheme. But it must not be supposed that the people are over-taxed, the maximum rate being two dollars per hundred on a sixty per cent valuation basis or an actual rate of \$1.20 per hundred.

Consolidation.

Reference has already been made to the county's consolidation program commenced during Superintendent Feagin's administration and completed this year. The accompanying map with legend shows graphically what has been done in this regard. The one-teacher school in this county is a thing of the past. All schools are consolidated in the technical sense of the word, and all but three schools are consolidated in the good sense of the word. Except in the two-teacher schools no teacher has under her charge more than two grades. There are three two-teacher schools, elementary schools with the six year course. There are four three-teacher schools, elementary schools with the six year course. There are five junior high schools, comprising grades one to nine inclusive, and employing from six to eleven teachers each. There are three senior high schools organized on the six-three-three plan and employing from thirteen to sixteen teachers each. These fifteen schools are the prosperous progeny of 47 little schools unsupervised and ill-equipped in the year 1916-1917.

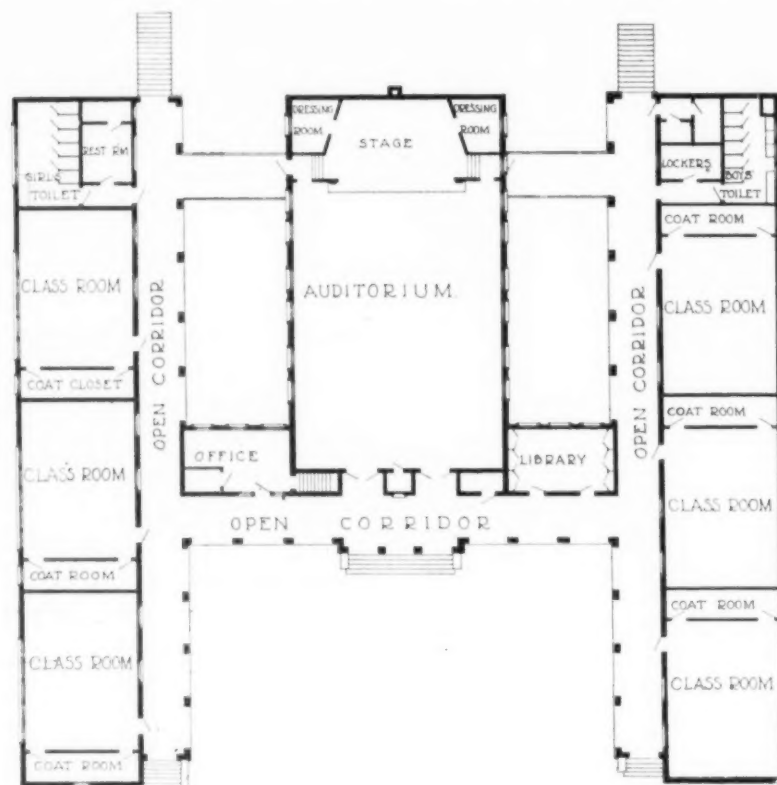
These consolidations have been completed with the general approval of the people but not without opposition. It has been possible to complete the consolidations promptly only because the roads were ready and because the Alabama school

code makes the county the unit of administration and authorizes the consolidation of two or more schools within a given district on the order of the county board of education.

Eloquent tribute to the county-wide scheme of consolidation is paid in the preparation of the teachers. At this time (December, 1922) there are employed 99 teachers. Of these 99 teachers, 25 are graduates of colleges or universities; 50 are graduates of Normal schools; and 24 have been irregularly educated. With the exception of three, all of these 24 teachers are graduates of high schools; three have attended normal schools one year each; four have spent a year in college; and three have been in college two or more years. Twenty teachers hold Alabama second grade teachers' certificates. The remainder hold first grade certificates or certificates of higher classification than first grade.

Transportation.

Especially in such a county as Montgomery there can be no worthwhile consolidation of schools without transportation and there can be no transportation without good roads. And in Montgomery county good roads came in advance of good schools. The accompanying map, showing the history of consolidation in the county, shows also a magnificent system of graded and graveled highways passable at all times of the year and in all kinds of weather. The fine co-



FLOOR PLAN OF THE CHISHOLM JUNIOR HIGH SCHOOL, MONTGOMERY COUNTY, ALABAMA.

operation of the county engineer and his forces enables the county school department to keep its trucks on the roads with negligible loss of trips and time.

Mr. T. L. Head, the assistant superintendent of education, a trained and experienced man of high character and ability, supervises transportation. Under his direction there are two high-class, well-paid mechanics at central garages who with the assistance of their helpers keep the 32 county-owned auto-trucks cleaned, repaired and ready for the road. Twenty-six trucks are driven by "all time drivers" who spend their time, when not engaged in driving or in improving the transportation equipment, in developing the school properties, being under the immediate direction of the school principal, known in the consolidated districts of some parts of the United States as the superintendent. Six trucks are driven by schoolboys. In addition to the foregoing there are two privately owned auto-trucks in the daily service of the county. And in order to consolidate the last of the one-teacher schools, which was inaccessible to auto-trucks, two wagons are used to convey children to two of the county's main highways.

The schools of Montgomery County are completely consolidated. The county's building program from this time forward will only have to

(Concluded on Page 135)

Essentials of Sound Pension Legislation

Miss Ida E. Housman, A. M., Hoboken High School, Hoboken, N. J.

Pension legislation concerns all classes of public employees and other wage-earners. This type of legislation would be of acute interest to taxpayers and employers if they realized its financial significance.

The idea of a pension is traced back to the Roman Empire. The word pension originally meant a reward to an individual for public service. Dr. Johnson in his famous dictionary of the English language defined a pension as an allowance made to anyone without an equivalent. The learned doctor was much embarrassed when George III conferred on him a pension of three hundred pounds for his service. During the last one hundred years, nearly all European countries have developed some form of an industrial pension system to safeguard workingmen in old age and disability. At the same time governments have established pension systems for army and navy men. These systems were followed by pension systems for municipal employees. Teachers were classed as civil employees, and so they were included under the municipal systems. Pension systems for teachers, therefore, constitute one feature in the scheme of social insurance. In the United States teacher pension systems began in 1869 with the establishment of mutual aid associations. The year 1894 marks the beginning of establishing pension systems by legislation, with little or no knowledge of sound pension principles. The first scientifically constructed teachers' retirement system in the United States was established in Massachusetts in 1913.

Serious criticism is made of most of our pension legislation. Legislators and employees are urged to organize their new systems or to reorganize their old systems on sound actuarial principles. The Pennsylvania, New Jersey and New York City retirement laws are mentioned as examples of sound, actuarial pension legislation. These laws are beyond the comprehension of the average citizen. Each was framed to meet serious conditions that had developed under a previous pension system. Although they embody many of the features of a sound pension law, they should not be used as models. The ideal retirement system is a system based on the principles of pensions, (the work of the pension expert) and the principles of mathematics (the work of the actuarial expert).

Actuarial Service Essential.

In the beginning of pension legislation, an actuary was an unknown quantity. At present, the pendulum has swung so that the actuary is all-important. There is need of an adjustment. A sound system does not imply a system loaded with actuarial calculations and burdened with rates. The actuary is a necessity in estimating the liabilities that have accrued under the old system, if one exists, and to determine the cost of the new system. The danger is that legislators, employers and employees confronted by the intricacies and complexities of an actuarial pension bill, either accept the bill because they have faith that the actuary knows his business, or else proceed to patch up the old pension law. The needs in pension legislation are soundness, actuarialness and simplicity. Recently, California after an actuarial investigation attempted to amend a retirement law that is unsound. The actuarial report had revealed an enormous liability. The teachers gained the impression from the report that no reorganization of the present system can be done unless "rates of separation and retirement be developed

from the actual experience of teachers in California." The amendment aggravated the evils of the existing pension system. Fortunately, Governor Stephens vetoed the bill and recommended "a fundamental reorganization of the retirement system on a sound financial basis."

Through the efforts of various agencies, such as the Carnegie Foundation for the Advancement of Teaching, the Institute for Government Research, the National Educational Association, the National Municipal League, etc., detailed studies have been made of the pension problem in the United States. The results of these investigations are gradually becoming evident. Since 1913, Massachusetts, Connecticut, New York City, Pennsylvania, Ohio, Vermont and New Jersey have established teacher retirement systems on the actuarial basis. An increasing number of states realize that their pension systems are in a precarious condition. In Oregon, a study of pension principles led to the postponement of pension legislation. Michigan, Minnesota, Indiana, Illinois and Kansas are interested in placing their retirement systems on a firm basis. The Iowa State Teachers' Association has raised about \$15,000 to employ an actuary so as to submit a sound pension bill to the next legislature.

Objects of Pension System.

Two objects are to be attained in establishing a pension system: First the employer seeks the interest of the service in providing for the elimination of the superannuated and the disabled employees; second, the employee seeks at minimum cost protection for old age, disability, etc.

The essential features in framing a sound pension law are: (1) A study of the pension problem; (2) a sound financial basis; (3) benefits; (4) reserve funds; (5) an administrative board; (6) compulsory membership.

The first essential feature is an intelligent study of the pension problem by a committee representing the state legislature and a committee representing the teachers. These committees should be aided by pension and actuarial experts. Joint committee meetings and public hearings should be arranged. Legislators, teachers and the public need education in pension principles and pension finance.

The second essential feature is the establishment of the system on a sound financial basis. This means that the system should be founded on a reserve basis. Pension systems have been financed and are being financed on the cash disbursement basis, i. e., annual appropriations by the state, supplemented by license fees, inheritance taxes, gifts, etc. A pension system is one of the most expensive business propositions in the state, and as such should be founded on a reserve basis. Each year the member of the pension fund and the state should contribute certain amounts as determined by the actuary, which when placed in the members' reserve fund and in the state's reserve fund will accumulate at compound interest, funds that will provide the benefits that should be guaranteed by the pension law. The law should provide for the careful safeguarding of the investment of the reserve funds.

In establishing the pension reserve, two classes of members must be provided for: teachers in service when the new law is enacted, and teachers who enter after the law becomes effective. The teachers who were in service at the time of the passage of the new law should be allowed credit for their teaching service.

Neither the state nor these teachers has contributed for these services. To credit these services creates a deficiency in the pension fund. This deficiency is known as the accrued liabilities. The state must assume this responsibility, and it may do so by appropriating each year an estimated amount so that at the end of a certain period of years this liability is liquidated.

Contributory Basis of System.

A second requirement in establishing a sound financial system is that it be placed on the contributory basis. Pension systems were first established on the free pension or non-contributory basis. This is a popular form of pension, the "something for nothing" type. A pension which is provided entirely by the government or the employer is ultimately extracted from the pockets of the wage-earners in the form of increased taxes or depressed wages. The cost of such a system becomes so burdensome that finally the scheme must be abandoned. Later, systems were founded on a contributory basis of one per cent, two per cent, etc., of the salary with a promise of a pension after 25, 30 or more years of service. This pension for one year, in many cases, was equivalent to the total contributions of the member. Bankruptcy was and is the fate of such pension systems. Both of these types exist in the United States today.

A sound financial pension system should be established on the joint contributory basis, the employer and the employee contributing equally to the retirement fund. In such a system, the teacher submits to a monthly deduction from her salary because the state is contributing an equivalent amount.

There are two methods of determining the rate of contribution. One method is the flat rate, i. e., all teachers contribute a uniform percentage of their salaries, and the state contributes an equivalent amount. This is the method used in the sound systems of Massachusetts, Connecticut, Vermont and Ohio. The other method is to make the rate of contribution depend on the age at entrance, the sex and the salary. This method is used in the Pennsylvania, New Jersey and New York City systems. In New Jersey, the rate for a woman entering the retirement system at age 20 is 3.91 per cent; for a man, 3.60 per cent; for a woman entering at age sixty, 7.29 per cent; for a man, six per cent. According to the statistics of life insurance companies women live longer than men. Therefore, a woman must contribute a larger sum than a man to purchase an equal annuity at retirement.

The Average Salary Plan.

In these three systems the benefit is to be a certain proportion of the average salary for the last five or ten years prior to retirement. This requires that the rates of contribution must be readjusted by the actuary to provide for changes in salary schedules. The Massachusetts, Connecticut and Vermont systems are based on the "saving plan," i. e., the retirement allowance consists of the annuity that can be purchased by the total amount to the teacher's credit at the time of retirement. In the most recent actuarial system, just established in Boston for municipal employees, including teachers, the "final salary plan" in estimating rate of contribution has been dropped and the "savings plan" "based on annual contributions of a fixed percentage of salary has been adopted."

This raises an important question: Shall the benefits depend on the average salary for the last five or ten years before retirement or shall the benefits be based on the total savings to the teacher's credit at retirement? If the benefit is to be based on prospective salaries, salaries that will be in effect ten, twenty, thirty or even forty years hence—a very unstable factor is introduced into the calculations.

The objection to the "savings plan" is that the teacher entering the service at a late age would not accumulate sufficient funds to purchase an adequate allowance. This difficulty will be solved when each state establishes its pension system on a reserve basis, and refunds to the teacher who leaves the service her contributions and the state's contributions, at four per cent compound interest. This amount could be transferred to the second pension system, and the teacher would not lose any pension credit because of migration. Until then, provision for such cases may be made by assessing such late entrants a higher rate of contribution as may be determined by the actuary, and as the state is receiving the service of an experienced teacher, increasing the state's rate of contribution.

Types of Pension Benefits.

The third essential feature of a sound pension system is the benefit. There are four kinds of benefits; superannuation, disability, withdrawal, and optional. The idea has been prevalent that a pension is a reward for service, and that, regardless of age, the state should provide a service pension. This has resulted in able-bodied men and women retiring after 25, 30 or 35 years of service. Since a retirement system provides for disability, and the return of a teacher to service in case of recovery, there is no need of a service clause. The retirement age should not be too high, preferably 60 years, with retirement at seventy years compulsory for the efficiency of the school service. The inclusion of a service clause adds to the cost of the pension system. If the law has been framed for a superannuation benefit, the addition of a service benefit may lead to financial difficulties.

As has been previously stated, the amount of the superannuation or the disability benefit depends on whether the benefit is to be a fixed proportion of the average salary for a period of years—the "final salary basis"—or whether the benefit depends on the total amount to the teacher's credit in purchasing an annuity—the "savings plan." In New Jersey, the superannuation benefit is as many seventieths of the average salary for the last five years as the teacher has total years of service. The New York City and Pennsylvania systems also use the "final salary basis." The impossibility of predicting the final salary makes the "final salary basis" the weak point in the Pennsylvania, New Jersey and New York City laws.

Providing for Withdrawals.

The withdrawal benefit is essential. This benefit consists in the refund of contributions, in case of resignation, dismissal or death. A serious defect in pension legislation has been the "tontine" principles, i. e., a teacher who left the service forfeited her contributions to the general pension fund. It is a recognized sound pension principle that in case of resignation, dismissal or death, all the contributions of a teacher should be refunded at four per cent compound interest. The New Jersey teachers' retirement law allows only $3\frac{1}{2}$ per cent in case of resignation, the remaining one-half per cent being transferred to the expense fund. In all cases of withdrawal, teachers who were compelled to join a pension system by virtue of appointment are entitled to their entire contributions plus four per cent compound interest. The



CHARLES H. MEYER.
Secretary of the School Board, Johnstown, Pa.
Died January 9, 1923.
(See Page 100.)

expense of administration may be met by an annual appropriation. The Vermont system refunds also the state's contribution, as it considers a pension as deferred pay.

A feature of most of the actuarial retirement laws is the optional benefit. A teacher at superannuation or disability retirement is allowed to choose an option. Generally, these options are: A total retirement allowance payable throughout life; or reduced payments, i. e., the actuarial equivalent of the annuity only; or the pension only; or the retirement allowance in a lesser annuity; or a lesser pension; or a lesser retirement allowance, with the provision that the balance be paid to the estate.

Difficulty of Wise Choice.

In its actual operation, the choice of the option is more or less of a gamble. A teacher may choose a total retirement allowance, payable throughout life. She may be retired on September first and die on September second. All of her accumulated deductions, which in the course of 35 or 40 years of membership in the fund may amount to \$6,000, more or less, are lost to her estate. If this teacher had chosen a reduced retirement allowance, or a reduced annuity, or a reduced pension, her estate would have been entitled to the balance. The unfortunate feature is that the low-salaried teacher will be forced on retirement to choose the total retirement allowance, since the retirement allowance is based on her contributions and in some systems, the average salary for the five or ten years preceding retirement. The fortunate teacher who has enjoyed a large salary or has an income will probably choose a reduced retirement allowance. This was recently illustrated in New York City. Mrs. Grace S. Forsythe, late associate superintendent of schools, chose a reduced retirement allowance. The teachers' retirement board paid an optional benefit of \$31,981 to her estate. Other large payments under this option were \$27,000, to the estate of the late Examiner Jerome O'Connell, and \$25,000 to the estate of the late District Superintendent Cornelius Franklin. At the same time that Mrs. Forsythe's estate received \$31,981, the widow of a teacher in the Manual Training High School was denied a benefit that would approximate \$10,000 because her husband's application for disability retirement had never been received by the board. In New Jersey, a teacher died shortly after the total disability allowance had been granted—after the first check had been drawn. Her estate lost her entire savings.

In the 1916 report of the Carnegie Foundation for the Advancement of Teaching, Henry S.

Pritchett wrote: "The history of pension and annuity enterprises has shown that in the long run the participants will expect each account to stand upon its own feet, and will become dissatisfied under any system that fails to return to the individual the unused reserve which he has accumulated. For example, a man has accumulated \$10,000 to pay an annuity to begin at age 65. He dies at 66, leaving a large surplus which goes to balance the losses due to lives which extend beyond the expectation. He has received exactly that for which he paid at the lower rate, but dissatisfaction over the arrangement will result."

A Solution Suggested.

There is an essential difference between the option of an insurance company in allowing the purchase of as large an annuity as possible, to be paid during the lifetime of the insured, and a similar option in a retirement system. A teacher is a free agent to buy an insurance policy; generally, in the new actuarial systems, membership is compulsory for teachers who begin service after the law becomes effective. For this reason, as a teacher is compelled to contribute a certain percentage of her annual salary, this teacher or her estate is entitled to the equivalent of her annuity savings with four per cent compound interest.

The problem is: How can the optional clauses be framed so that the member or the estate receives the value of the accumulated salary deductions?

The following is suggested as a possible solution: In case the teacher chooses a total annuity or a total retirement allowance, i. e., the largest annuity and pension that can be purchased payable throughout life, her estate shall receive the difference between the accumulated annuity savings and the amount received in annuity benefits. For example, a teacher's annuity savings reserve of \$5,000 and a pension reserve of \$5,000. She chooses the total retirement allowance. Suppose she receives a \$500 annuity and a \$500 pension, i. e., a total retirement allowance of \$1,000. She dies after receiving three payments or \$3,000. She actually used \$1,500 of her annuity savings. Therefore, her estate is entitled to the balance in her annuity savings fund of \$3,500.

An Illustration.

In case the teacher chooses a reduced annuity, or a reduced pension, or a reduced retirement allowance, then her estate shall be entitled to the difference between the cost of a total annuity or pension or retirement allowance and the cost of a reduced annuity or pension or retirement allowance, as determined by the actuary. Also, her estate shall receive the difference between the cost of the reduced annuity and the actual amount that was used in annuity payments. If the teacher lives so long that she receives in annuity payments the equivalent or more than the equivalent of her annuity savings, no balance will be left for her estate. To continue her payments, money will have to be taken from another fund. For example, a teacher's annuity savings fund amounts to \$5,000; the pension fund amounts to \$5,000. She chooses a reduced annuity and a reduced pension, each costing \$4,500. No matter how long she survives, her estate is entitled to the balance of \$500 in her annuity savings fund and the balance of \$500 in her pension reserve fund. Suppose she receives three payments amounting to \$2,700, i. e., she receives \$1,350 from her annuity savings fund. Therefore, her estate will be entitled to the difference between \$4,500 and \$1,350 or \$3,150. This will give a total return to her estate of \$1,000 plus \$3,150 or \$4,150. The balance which is to be paid to the estate may be in the form of

an annuity, a lump sum, or some other equivalent benefit.

Since the operation of the New York City Teachers' Retirement Law, the privilege of choosing the reduced retirement allowance in case of disability retirement has created a difficult financial situation. If a teacher dies before retirement, the estate is entitled to the total annuity savings. In case the teacher, afflicted with an acute disease, retires with a reduced annuity or pension or retirement allowance, the estate is entitled to the difference between the present value of the annuity, or the pension or the retirement allowance, as it was at the time of retirement and the amount paid in benefits. The New York City Teachers' Retirement Board held a hearing on November 16, 1922, on the recent ruling of the corporation counsel limiting disability retirements under the option of a reduced retirement allowance to chronic cases and excluding acute cases. Actuary George B. Buck of the retirement board stated "that the whole trouble was that teachers were converting death cases into retirement cases, for which no reserve was provided." From September, 1917, to June, 1922, the New York City retirement fund "has paid out \$375,000 in optional benefits, all but \$80,000 of which was disbursed to people who were dead before the end of thirty days."

Reserve Funds Important.

The fourth essential feature of a sound pension law is to provide for reserve funds. These may consist of an annuity savings fund, i. e., the teachers' contributions with four per cent compound interest; a pension reserve fund, i. e., the state's equivalent contributions; an expense fund, i. e., yearly appropriations; and, an accumulation fund, i. e., moneys transferred from the pension reserve fund, interest on investments, etc. The accumulation fund may be used to pay the retirement allowances of teachers who survive to such ages that their total savings will not pay for their benefits.

The fifth essential feature in establishing a sound law in an administrative board, represent-

ing the state and the teachers, and including the treasurer of the state. This board should be empowered to employ an actuary and the state attorney-general may be delegated as the legal adviser.

The sixth essential feature is that membership should be compulsory. Otherwise, the purpose of a retirement system may be defeated. The younger teachers are not interested in a retirement system and the older teachers, rather than to pay the higher rates, often prefer to invest their money or spend it. These teachers do not realize that an insurance company or a bank cannot give them the return on their investment that is given by a sound retirement fund. The future welfare of the teaching profession demands compulsory membership.

Unwise Measures Promoted.

Although various state and city commissions have made investigations of existing funds, have published reports, and have proven that a number of funds are facing bankruptcy, either the teachers fail to read these reports or refuse to read "the handwriting on the wall." With abundant literature on the subject teachers continue to introduce bills to retain pension systems that have been shown to be unsound. Chicago has a pension system that undertakes to pay a pension of \$600 a year after 25 years of service, in return for total contributions from teachers of \$850. The Illinois Pension Laws Commission proved that the Chicago Teachers' Pension and Retirement Fund is facing bankruptcy.

The most dangerous enemy of the new actuarial pension law is the non-actuarial amendment. The teachers argue: The policemen and the firemen are able to pass laws providing free pensions or low-rate contributory pensions after 20 or 25 years of service. Why should we pay the higher rates of an actuarial system when the city formerly wholly or partially gave us a pension? Why must we teach until age 62 or 65 when a policeman can retire at age 55 or less on a service pension? The teachers fail to appreciate, that although the policemen and the

firemen may receive big benefits today for little or no contributions, the trend of the times is against the state or the city adding an immense amount to its payroll each year to pay service pensions to many persons who are able to work.

At the present time, the New York City teachers' associations are urging a further amendment of their actuarial retirement law that will permit retirement after 30 years of service. Against the advice of persons who had studied the pension problem, the teachers in New York City and New Jersey introduced the 35 year service clause. These teachers do not realize that the reason why their former pension systems approached bankruptcy was because the founders through lack of knowledge established service pension systems without estimating the future costs. As retired teachers generally do live—after they are relieved from the nervous strain of teaching in our modern schools—these funds were gradually exhausted. When these funds were in a hopeless condition, teachers' associations and state legislators called in the actuarial and the pension expert. Recently, in New York City a referendum vote was taken to determine how many teachers wish the retirement law amended so as to permit retirement after 30 years of service. A teacher is not expected to know what effect a 30 year clause will have on the future rates of contribution and the future costs in such an actuarial system as exists in New York City, New Jersey or Pennsylvania. It is advisable for a teachers' association to raise a fund to engage one of the best actuaries and to appoint a committee of teachers who are interested in legislation and finance to study the suggested amendment. Public meetings and hearings may be held where persons who have made a study of the pension problem might show the merits and defects of the pension system, and where the proposed amendment may be discussed, not only from the teacher's point of view but also the actuary's and the state's. No attempt should be made to pass an amendment unless the amendment has been endorsed by an actuary and by pension experts.

The Report of the N. E. A. Legislative Commission

W. S. Sutton, The University of Texas.

In the report of the legislative commission of the National Education Association, which was presented to the legislative assembly last July, the Towner-Sterling Bill is discussed at length. While students of education and government will find much to commend in that report, many will be unable to consent to all its contentions unless some substantial reservations be attached thereto.

I have long been a member of the N. E. A., and for some years have studied, with what native and acquired powers I possess, the interrelated problems of education and government which are involved in the Towner-Sterling Bill. The N. E. A., an organization composed of individuals whose cardinal function is to develop in the rising generation intelligence and patriotism and rational liberty, should not be surcharged with the spirit of intolerant propaganda; such organization should, rather, lay emphasis upon the free expression of all its members concerning any and all policies that have already been adopted or that may be proposed for adoption.

One is, therefore, not departing from either the path of courtesy or duty, should he, either

orally or in writing, comment adversely upon some phases of the commission's report.

The first paragraph of that report tells of the wide-spread publicity given to the merits of the Towner-Sterling bill by its advocates. What is detailed in that paragraph is, doubtless, true, for there has never been in America a more thoroughly, systematically organized propaganda for any other educational measure.

My objection to a great deal of this activity is that the merits, actual and alleged, have been pressed upon the attention of everybody that would be willing to listen or that could be run down and compelled to listen. The defects of the bill, however, have not been considered with the same degree of care and open-mindedness. To be perfectly plain about the matter, the so-called enemies of the bill, who are by no means organized financially or otherwise, have received scant courtesy. In fact, the proponents of the measure (not all of them, but some of them) speak of those who oppose it as if they, the opponents, were in the stage of culture of six-year-old children.

Signed Without Serious Reflections.

I am persuaded that a great many friends of the fifty-fifty educational policy embodied in the Towner-Sterling bill have signed on the dotted line without serious reflection and genuine information, either before they signed or while they were signing or after they signed. I very gravely question the wisdom of conducting a campaign for righteous educational measures if the ways and means for promoting them be characterized by the ultra-propaganda spirit that is too often manifested by friends of legislative measures in other fields than education.

Such inordinate zeal and activity as lead to methods of compulsion, either veiled or actual, may be excused in time of war, but certainly not in days of peace. It is far more important that we preserve liberty in America than that we get money for schools or anything else, for without liberty neither schools nor churches nor government is to be endured by men who will not submit either to physical or to spiritual peonage.*

*"He who saves his country, saves all things, and all things saved do bless him. He who lets his country die, lets all things die, and all things dying curse him."—Inscription on the monument erected in Atlanta, Georgia, in honor of Benjamin H. Hill.

In the second paragraph of the report of the Commission regret is expressed for the failure of Congress to enact the Towner-Sterling bill into law; but there is avowed strong hope that the passage of that bill long-delayed, will soon be accomplished. This hope is founded upon the fact that a committee visited President Harding last May, and was much encouraged by the kindly way in which the chief executive conducted himself during the conference.

Now, members of that committee do not actually quote what the President said on the occasion of the visit to the White House; but they left that mansion convinced "that the administration would recommend the creation of a department of education and welfare!" They, furthermore, went back to their respective homes, believing that "both the President and Congress would favor federal aid for the promotion of those special phases of education provided for in the Towner-Sterling bill."

Menace of Centralization.

I fear that the members of that committee have not read President Harding's Plymouth Rock address, which was delivered last summer and in which he manifested his opposition to the growing centralization of power in Washington, because of which growth Congress undertakes duties which the forty-eight states should severally discharge. The fact is that Mr. Harding called this evil "the greatest menace to our country today." It is possible, also, that members of that committee have overlooked similar statements made by the President a few days ago in his message to the Congress which is now in session.

Simply because the chief executive is a man of good manners, and treats people courteously, is no evidence whatever that he is ready and willing to sanction, either in his private or his public capacity, legislative schemes that are brought to his attention. The members of the committee ought to remember that a gentleman, even though suffering from nausea, is too polite to betray the unfortunate condition of his stomach.

The SCHOOL BOARD JOURNAL, I am confident, will not surrender much valuable space in its columns to the defense or the criticism of the Commission, and, therefore, I shall abridge this article by commenting briefly upon the three leading contentions found in the report.

1. Says the commission: "The Federal government should increase the effective operation of its existing educational activities by unifying them in a department of education under a secretary of education. The creation of such a department will, we are convinced, provide the sanction and recognized leadership necessary to the highest development of our public school system."

One who is acquainted with the vagaries of the human mind, who knows how queerly it sometimes indulges in processes of ratiocination, is not surprised at anything that may be uttered by an educational expert or at anything that may be seen in educational books or reports.

I must, however, confess to some degree of astonishment that the chairman of the commission who, for many years by precept and example, has been laboring in season and out of season to disentangle the administration of school affairs from partisan political control, should seriously propose that, at the head of the educational interests of the federal government, there should be placed a politician. To my certain knowledge for forty years the battle for efficiency in the work of public schools, elementary, secondary, and higher, rural, as well as urban, has centered around the question of the advisability and the necessity of the school world's being free from political domination.

One who is familiar with the history of public education in America during the last fifty years can readily call to mind the names of not a few men who shortened their days of public service and their days of living in this world by contending boldly for the separation of the school from politics. "If you live with a man that limps politically, you, yourself, will learn to limp in the same fashion," has become an educational proverb.

Professional versus Political.

There can be no doubt about the fact that a cabinet officer is a politician. The dignity that education needs is a kind of professional dignity, and not a dignity which belongs to a political office. It seems to me strange that it has never occurred to the friends of the Towner-Sterling bill that there is any other way to promote education in America than to have it organized under the control and direction of a successful politician who may be selected to serve as a secretary of education. One has very little intellectual resourcefulness if he cannot devise a dozen or more non-political plans, each of which would be more consistent with the principles of professional education which the chairman of the commission has so long and so conspicuously advocated.

2. The committee declares: "The Federal government should extend the established principles of federal aid to the states in order to encourage and to assist the states in the development of a program which will make for the elimination of certain recognized defects in our educational system, existing quite generally throughout the country."

The commission has no doubt that federal aid for promoting education in the states is an established principle. It may be an exhibition of temerity to call into question this view; but prudent men are not accustomed to give their allegiance to theories because more or less partisan-minded people declare them established principles.

Now, a principle is something that you can tie to permanently, just as one can confidently depend upon the operation of the laws of nature, that work uniformly, and are not subject to either repeal or amendment. There is abundant proof to the effect that many people do not believe federal aid on the fifty-fifty plan has yet risen to the importance of an educational principle.

There are many patriotic Americans, possibly fifty per cent or more of well-informed Americans, who are profoundly convinced that education is not among the powers expressly delegated to the federal government, but that it is a power reserved to the states. These well-informed Americans, furthermore, are of the opinion that the movement to extend federal powers under the "general welfare" clause should be arrested, instead of encouraged, for this clause has, in their opinion, been stretched to undue, if not scandalous, proportions.

It is a well-established principle of law that one is not permitted to do indirectly that which he can not legally do directly. No matter, therefore, how splendid may be the purposes in the hearts of the friends of the Towner-Sterling bill and other similar bills, it, nevertheless, remains a fact, that the constitutionality of such bills is questionable. Certainly, the Massachusetts legislature has not been converted to the doctrine that federal aid on the fifty-fifty basis is an "established principle," for that body has recently directed the attorney general who serves

¹Massachusetts, along with other states of the North, in 1861-65 saved the Union by fighting against states rights; she now seems disposed to save it again, but this time by fighting for states' rights.

(Concluded on Page 128)

the commonwealth of Massachusetts, to institute legal proceedings to determine the constitutionality of the Sheppard-Towner maternity law.²

Money Preferred to Constitution.

The policy of federalizing our government and of consequently minimizing the governmental functions and obligations of states and municipalities has developed so rapidly and so tremendously since the Civil War as to make it seem wise and proper to the advocates of centralized control to advocate any measure which, by the wildest dreams of the imagination, can be deemed a means for promoting the general welfare. It is not at all singular, furthermore, that these measures invariably have rather attractive appropriations in sight.

Inasmuch as the love of money is the root of all evil, it is no wonder that the average man, and even one who may be above the average, falls in the presence of financial blandishment. It is not very far from the truth to testify that a great many people are perfectly willing to accept substantial appropriations to carry on the particular work in which they are interested. It seems to me that I hear them insistently calling to the federal treasury: "Bring on the money; the constitutionality or the wisdom of the Congressional act which permits you to sustain us, is a matter of no moment."

One other remark upon this phase of the question. A loyal American citizen is loyal to two governments, the federal government and the state government. Whatever rights and powers were reserved by the states at the time of the adoption of the Constitution, barring amendments abridging those rights and powers, are yet in force.

If the commission and the N. E. A. would subscribe to this view, and if the latter would make liberal appropriations for a thorough-going campaign to strengthen the backbone and quicken the educational conscience of the several states, it would perform an invaluable service, not only to education, but also to government, as well. In support of this contention, I quote the following paragraph taken from an address made by the Hon. Elihu Root before the American Bar Association in 1916:

Elihu Root's Warning.

"There will always be danger of developing our law along the lines which will break down the carefully adjusted distribution of powers between the national and the state government, and, if this process goes on, our local governments will grow weaker, and the central government stronger in the control of local affairs, until the local government is dominated from Washington by the votes of distant majorities, indifferent to local customs and needs. When that time comes, the freedom of adjustment which preserves both national and local liberty in our system will be destroyed, and the breaking up of the Union will inevitably follow."

3. The third declaration of the commission is like unto the second, and reads as follows: "These desired ends" (the extension of federal aid to encourage the states and the elimination of certain recognized defects in our educational system), "the commission unhesitatingly assures us, 'can be attained without interfering with the rights of the localities and of the states to control, organize, administer, and supervise their own schools.'"

Once more, with becoming modesty I trust, yet with some emphasis, let me suggest that there is reason to doubt the correctness of the solemn affirmation that the elimination of defects in our educational systems (systems, not system, for we have in America forty-eight state systems of public schools), can best be ac-

A Stupendous Schoolhouse Problem

Greater New York's School Architecture and Building Labors Discussed by
C. B. J. Snyder.

The problem of housing a school population of nearly one million, and the methods and means employed to solve that problem, cannot fail to excite interest on the part of the entire American school public. The unusual and exceptional which accrue out of the very largeness of things may not afford lessons to the rest of the country, but on the whole it may also be found that there is after all a great similarity in the nature of large and small city school problems.

C. B. J. Snyder has served as superintendent of school buildings of New York City for nearly thirty-two years. During this time the school system has expended for repairs approximately \$38,000,000. In addition to this \$3,950,000 which makes the total expenditures for alterations and repairs about \$42,000,000.

The cost of new buildings planned and erected by him during the period named exceeds the sum of \$180,000,000. This stupendous figure, for similar purposes and time specified, is unequalled by any city in the world, and constitutes a most marvellous chapter in the history of schoolhouse construction in the United States. Thus, Mr. Snyder, holds the distinction of having planned and constructed more school-housing than any other man in the world.

The recent report submitted by Mr. Snyder to the board of education therefore assumes a new significance. While the document deals with local conditions there is much that may be of general interest to the school administrators throughout the country.

The Snyder report is prefaced with Associate Superintendent Shallow's statement: "Our enormous population which, when immigration is unrestricted, literally spills over adjacent territory in every possible direction, tends to seek areas which are attractive because of the low cost of housing, the cost and the character of transportation, and the proximity of such areas to places of employment. Such shifting of population, which means that some sections of the city have partially vacant school buildings while others are suffering from excessive congestion, because of the lack of such buildings, demands not only that our future building



MR. C. B. J. SNYDER.

program be developed on a comprehensive scale, but also in terms of the best possible forecast as to the future growth of our city."

A Huge Building Bureau.

Besides the superintendent of school buildings there are six deputy superintendents, a main business office and five borough branch offices. There are separate sections of administration, sanitation, heating and ventilation, electrical conveniences and furniture. The force employed may be enumerated as follows: administration 61; draughtsmen 225; inspection 92; mechanical 67—total 445. The contracts are awarded by the board of education.

The planning and construction of new buildings does by no means complete the scope of the bureau. The maintenance of the several buildings, looking after needed repairs and re-

habilitation involve immense labor and many considerations in the direction of economy. The deterioration of buildings is constant. During the severe winter season the problem of housing comfort and meeting repairs becomes a difficult one. And yet the bureau has succeeded in keeping the cost of the repairs under two per cent of the original cost.

An interesting graph is presented which shows the number of buildings planned and constructed for each year since 1907. The zig-zaggy character of the graph notes that, while the board let twenty four general construction contracts in 1907, it only let two contracts in 1909 and none in 1918. In 1910 the contracts jumped to thirteen and in 1913 to seventeen, and in 1922 to thirty one. During the period from 1907 to 1922 a total of 197 general or major construction contracts were let.

Planning of a School Building.

In planning a new building the school authorities have long recognized the fact that one fixed plan, no matter how well conceived and executed, will not serve in every instance or condition. Every site selected for building purposes and every locality involve special considerations.

Certain uniformity of treatment, of course, is observed, but the general layout must lend itself to the shape of the site and to the specific requirements of the school. The unit of requirement is the single classroom, but the number of classrooms necessarily varies, and with it the whole arrangement.

While in the planning of every new building site conditions and local circumstance are encountered the element of standardization, nevertheless, plays a highly important part. In fact, the standardization of plans has been carried

GENERAL CONSTRUCTION CONTRACTS
1907 TO JUNE 30, 1922

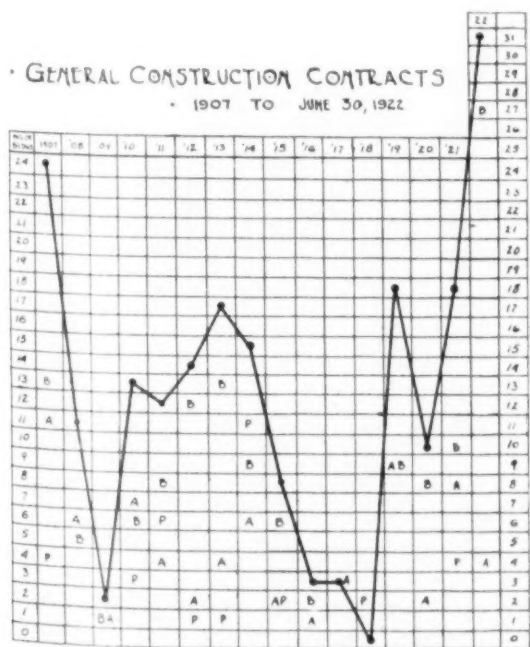


FIG. 1.

The number of contracts for new buildings and additions let during period from 1907 to 1922.

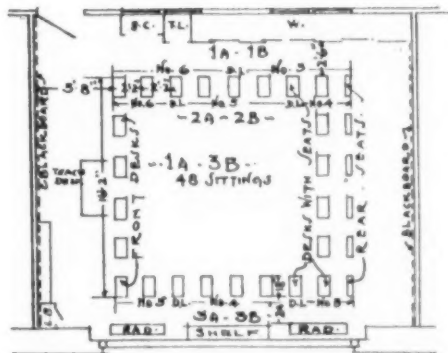
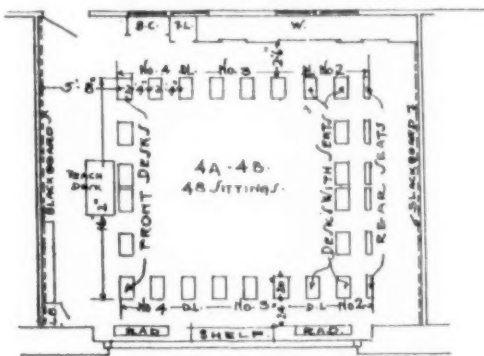


FIG. 2.

Layout of classrooms for Grades 1a to 4b inclusive. The height of seats ranges from 11 to 15 inches.

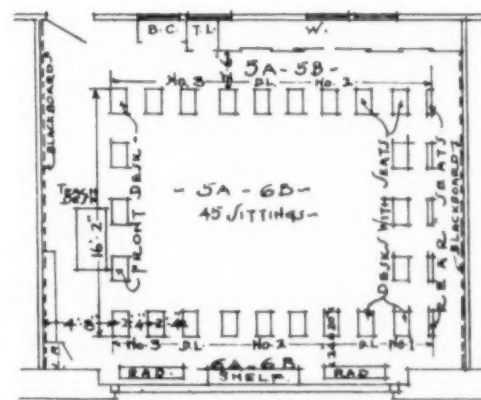
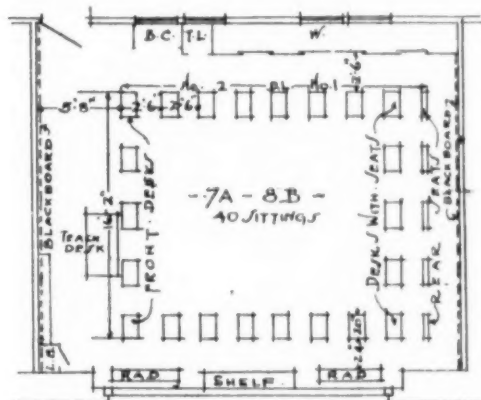


FIG. 3.

Layout for Grades 5a to 8b inclusive. The height of seats ranges from 14 to 16 inches.

as far as this was deemed feasible and practical and with decided resultant economies.

The classroom units are worked out on four standard plans, based on 40, 45 and 48 sittings. It was also found economical to plan the building upon a basis of the number of classrooms, namely, 12, 16, 26, 36 or 48 classroom units with auditoriums and playgrounds. There are also some schools having 56 and some 72 classrooms. Some of these buildings run ten stories high.

To find a site in the more densely populated centers which may avoid the noises of the street traffic and at the same time afford light and air is not an easy task. The plots selected are usually from 150 to 200 feet. The side walls are built immediately upon property lines, arranging the shape of the building so that the courtyard opens out on the street.

Sites for new buildings are usually secured by condemnation proceedings. This is a quick and satisfactory process. The school authorities select the site and the proceedings are begun. Soon after the wrecking of the old buildings begins. It so happens at times that the site chosen cuts off one half of a building on a lot line and leaves the other half intact.

The law of condemnation for school purposes is quite expeditious. Long before the court has determined upon the value of the plot of land so condemned the new school building may be in course of construction. The buildings are usually E, U, H, or L shape.

The Routine of a School Plan.

The route which a schoolhouse plan must travel from the time of its inception to the time when the contractor begins his work seems somewhat laborious yet every successive step is essential in reaching the desired end. These several steps are as follows:

1. Instructions issued by the Superintendent of Schools to prepare building program, known as the Corporate Stock Budget.
2. Preparation of data by Associate Superintendent.
3. Consideration by Board of Superintendents.
4. Consideration by Committee on Buildings and Sites of the Board of Education, or

5. By the Board sitting as a Committee of the Whole.
6. Approval by the Board of Education.
7. Forwarded by Secretary to Board of Estimate and Apportionment.
8. Reference by that Board to the Committee on Finance and Budget.
9. Examination by its engineers.

10. Report by engineers to Committee on Finance and Budget.

11. Action by said Committee.

12. Action by Board of Estimate and Apportionment.

13. Notice to the Secretary of the Board of Education.

14. Report of Associate Superintendent Shallow to the Board of Superintendents as to the requirements of any particular building—number of rooms, grades, etc.

15. Action by Board of Superintendents.

16. Report to the Board of Education. Consideration by Committee on Buildings and Sites.

17. Approval by said Board.

18. Copy forwarded by Secretary to Superintendent of School Buildings.

19. Obtaining of the building survey.

20. Consideration by the Superintendent of School Buildings as to what plan would best meet the requirements.

21. Preparation of plans in the draughting-room.

22. Submission of preliminary design to the Art Commission.

23. At completion of drawings, submission for final approval of the Art Commission.

24. Submission and approval of Bureau of Buildings in the Borough in which the job is located.

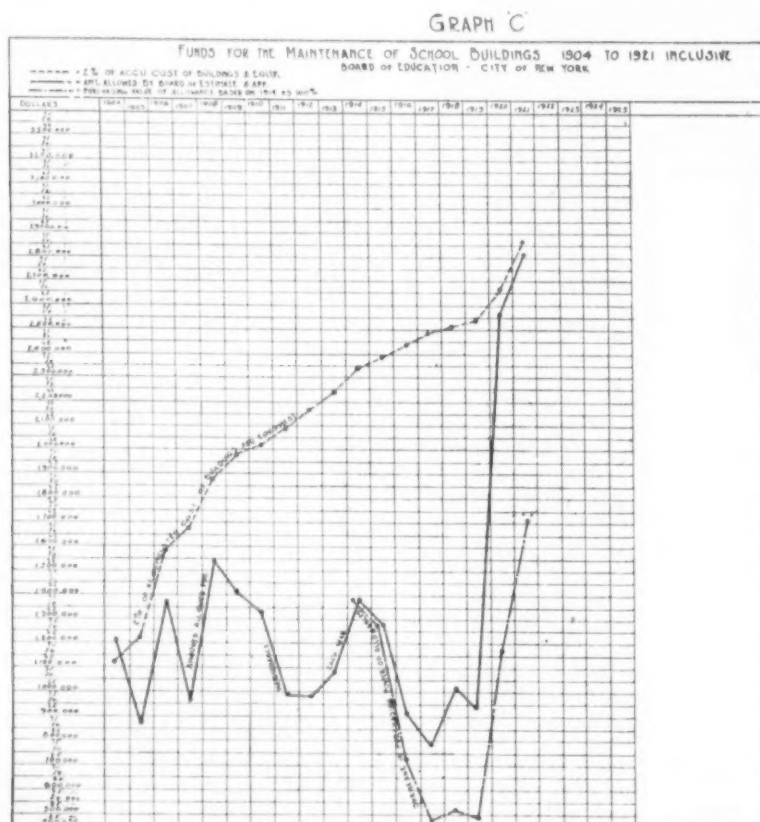
25. If plumbing, gas-fitting and electric work are included, submission to the Department of Water Supply, Gas and Electricity.

26. Preparation and printing of specifications.

27. Submission to and approval by Board of Education.



MANHATTAN TRADE SCHOOL FOR GIRLS, 22ND ST. AND LEXINGTON AVENUE, New York, N. Y. C. B. J. Snyder, Architect.



SHOWING THE COST OF SCHOOLHOUSE CONSTRUCTION OVER A PERIOD OF SIXTEEN YEARS.



35. Notice to Secretary of Board of Education.
36. Notice from Secretary to the Superintendent of School Buildings.
37. Submission to the Corporation Counsel for approval of form of contract and advertisement.
38. Filing in the *City Record* and advertising for ten days.
39. Opening of bids by Superintendent of School Buildings.
40. Report to Board of Education.

41. Making of award.
42. Notification to the Comptroller for the approval of sureties.
43. Then return to Board of Education.
44. Surety bonds attached.
45. Contract signed.
46. To Auditor for recording.
47. Then its return to the Comptroller for his final approval.
48. Notice of which is received, and

(Concluded on Page 135)



WILLIAM H. HATCH SCHOOL, OAK PARK, ILL. Childs & Smith, Architects, Chicago, Ill.

THE NEW WILLIAM H. HATCH SCHOOL. In Course of Construction at Oak Park, Ill.

As a result of a survey of the physical needs of the Oak Park elementary schools the board of education of that village has adopted a seven year building program. Funds have been made available through the increase of the tax rate for elementary school purposes and three building projects are at present under way. Among the schools now under construction is one erected in honor of William H. Hatch and is to be known as the William H. Hatch School. Mr. Hatch was for twenty-five years superintendent of schools in Oak Park and is now residing at his home in Rockford, Minnesota. The people of Oak Park have endeavored to plan a school building which will be a fitting tribute to the high esteem in which Mr. Hatch is held in that community.

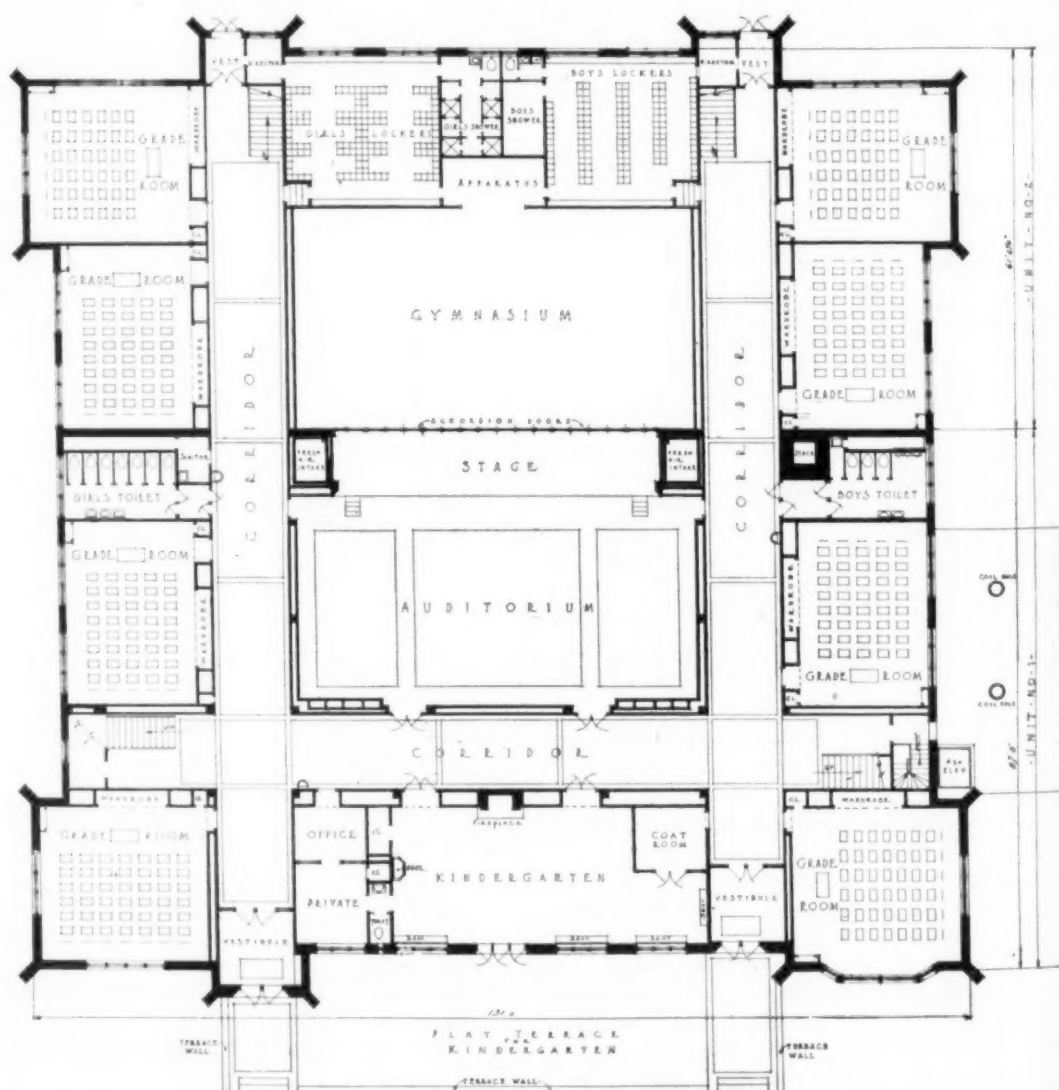
The site is 281 feet by 681 feet, the building being located at the north end of the block having before it a carefully developed playground with a southern exposure. The design of the building is in the English Tudor, three stories in height of entirely reinforced concrete construction with brick exterior and cut stone trimmings around windows and doors.

The plans and specifications have been prepared by Childs and Smith, Architects, Chicago, Illinois. Danville cloister face brick has been selected to be laid up in Flemish bond with a stone color mortar joint in order to produce the desired architectural effect. The molded trim around the doors and windows will be of buff Bedford limestone with a smooth finish surface. Brick buttresses at the corners of the building, indicating strength, will be capped with carved stone finials and delicate carving and gargoyles will enhance the main entrance in the southwest portion of the building. The roof construction will be of a new type dead level roof covered with a 20 year guaranteed roofing material. All windows will be of the double hung sliding type and in order to relieve the exterior from large panes of glass, which would necessarily be a plate glass and very expensive, the sashes have been divided into small lights of double strength glass by small wood mullions giving a very quiet and pleasing effect to the exterior.

The interior arrangement of the building is designed to give the maximum efficiency for instructional purposes. There will be thirty-two classrooms in addition to shops, laboratories, a library, administrative offices, an auditorium, and a gymnasium. The waste space often found in school buildings has been reduced to a minimum. A unique feature of the administrative plan is to be found in the fact that the building may be used in three different forms of organization. Its design will lend itself to

the regular elementary school program of eight grades.

It may be modified and used as a platoon school without making any changes in the structure or plan of the building. The fact that shops and laboratories and special rooms are provided will make possible the organization of the work upon the basis of a nine year elementary school, a type of organization which is being seriously considered in some of the larger cities.



FIRST FLOOR PLAN, WILLIAM H. HATCH SCHOOL, OAK PARK, ILL.

The kindergarten will be of a special design complete with brick fireplace, fountain and a small pool lined with turquoise blue Enfield tile, seats, cases, and a wood picket fence forming a wainscot. The library is especially designed as a room in which opportunities for training pupils in work with original sources can be provided. The wood trim in the domestic science department will be finished in white enamel and the walls painted in ivory white. The sewing room, which is adjacent to the domestic science room, to permit of serving from the kitchen, is provided with large groups of windows to flood the entire room with light.

A demonstration room has been designed to function as bleachers in gymnasium service and also for class conferences where technique and demonstration work is desirable. The concrete beams in the open ceiling construction will be painted and glazed in special colors and all furniture and hangings will be of a very simple character but in harmonious color scheme.

The heating system will be of the most modern type split system, with radiators hung on the wall omitting the legs, to permit easy cleaning under same. The tempered air for ventilating rooms will be brought in through registers in the ceiling distributed in such a manner as to get best results. A unique feature in the building is found in the fact that there is no rear elevation. Each one of the four sides presents the same architectural beauty and is constructed of the same material. Throughout the building the architects have kept in mind economy, practicability of plan and construction, and good architectural design. The building is being erected by the Schmidt Bros. Construction Co., of Chicago, Illinois, and will be ready for occupancy in September, 1923.

KEEPING UP WITH THE WOMAN.

H. E. Stone.

Woman votes. Woman talks. Woman has civic rights. She no longer says nothing, like Madame Defarge, and coughs, when her lord comes in. Woman is a creature even in the eyes of the law.

State legislatures are interested in woman. City boards of education are interested in what woman thinks. Politicians are interested in what woman will do.

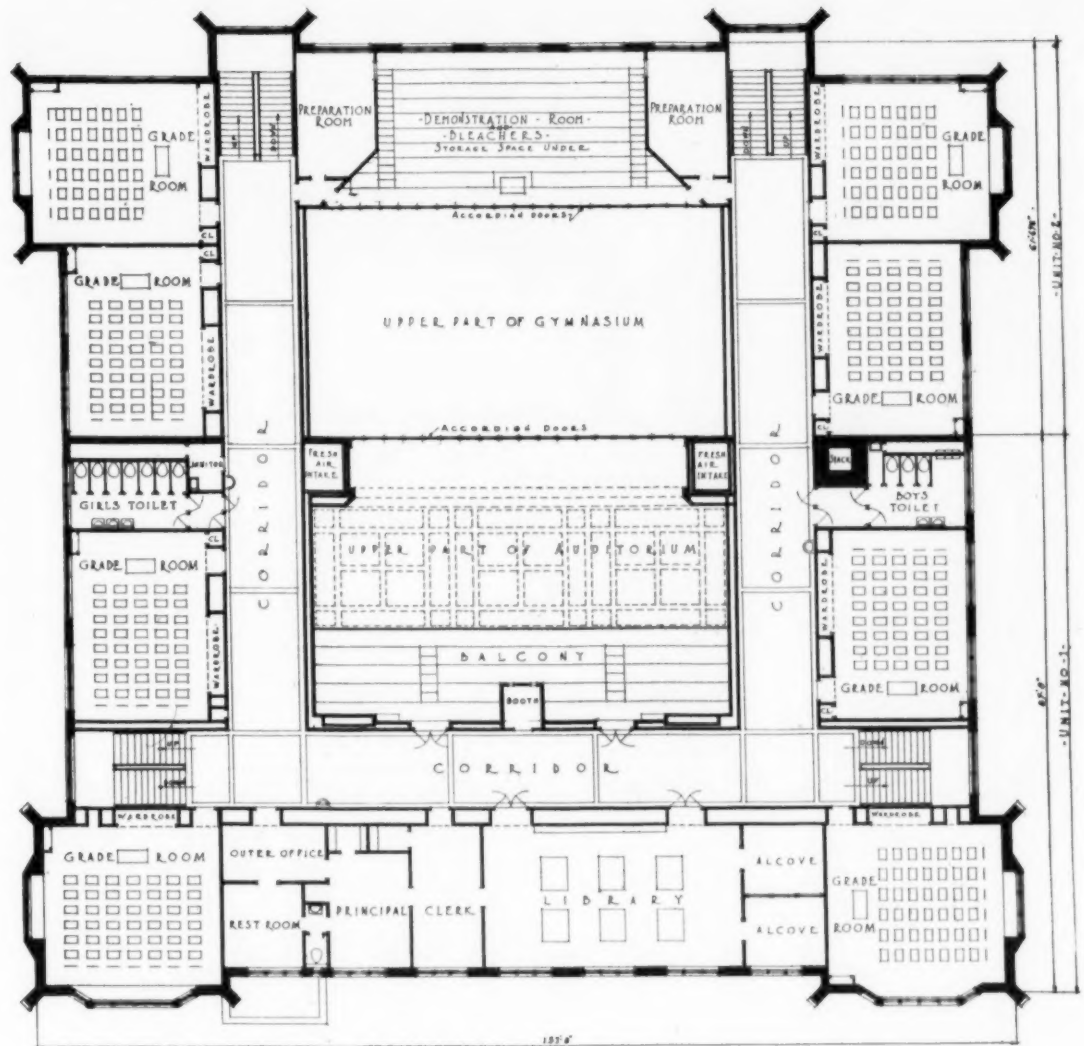
Woman is ubiquitous, versatile, and at least as intelligent as man. Woman is a reader, a writer, and an expert in the promulgation of ideas. Ideas are dynamic.

But hold! There is danger. Woman is emotional. Her main interest is the home, the school, the church, and human service. She talks about child clinics, sanitation, public health, vocational and social advisers. How can she solve problems that relate to jails, policemen, streets, property rights, and the needs of business. She can't go on "Booster Trips."

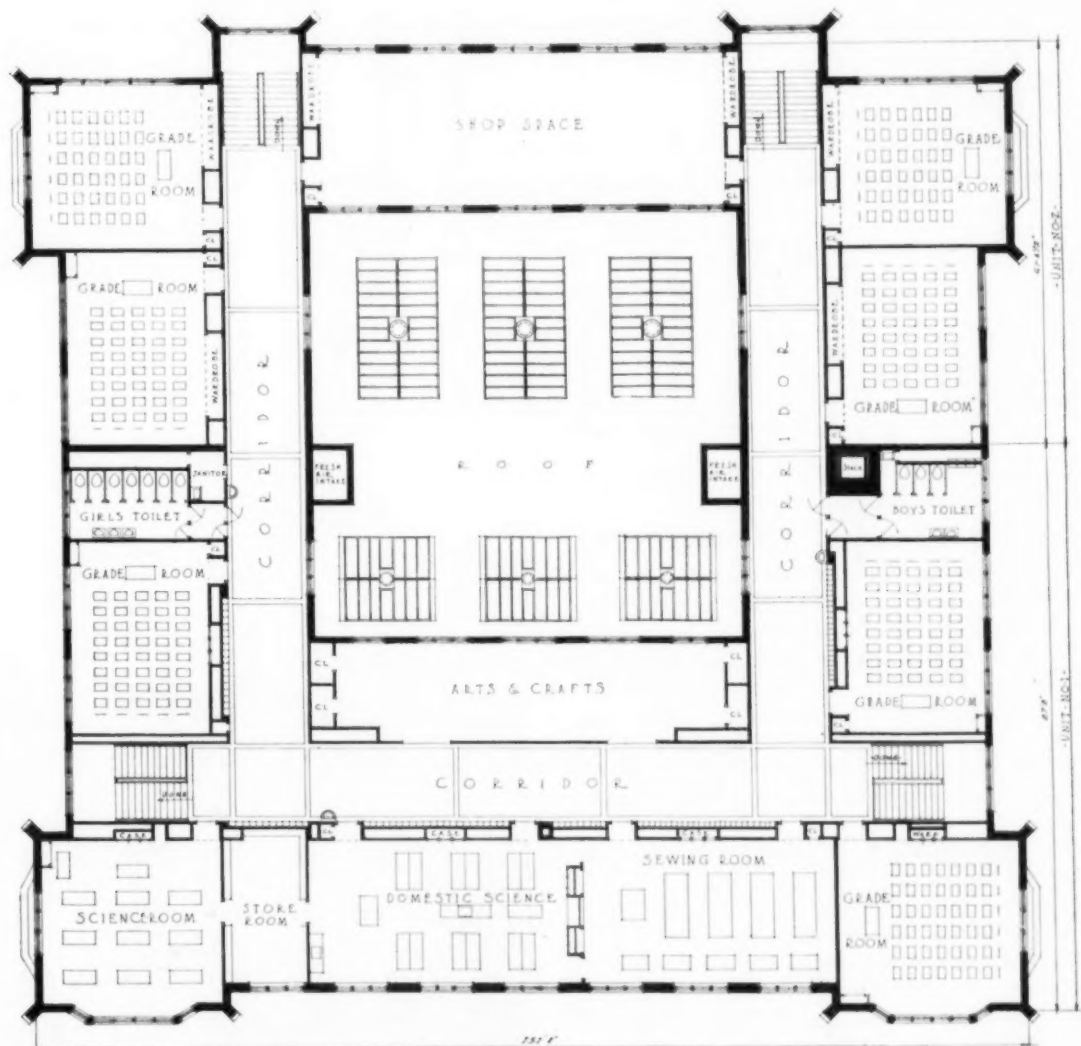
Woman does not promote the necessary harmony for success in business. She mixes up in moral issues. Right now woman is criticising the modern dance. She is even going to the length of insisting upon dance hall inspectors. Woman is in action.

And man—poor man! Man is engrossed in business affairs. How can he take time to read the Woman's magazines? He's busy with the sporting page. He must read his trade paper. He must have an occasional session with a detective story "just to rest his mind." He can't neglect his golf club. And his automobile consumes almost as much time as it saves.

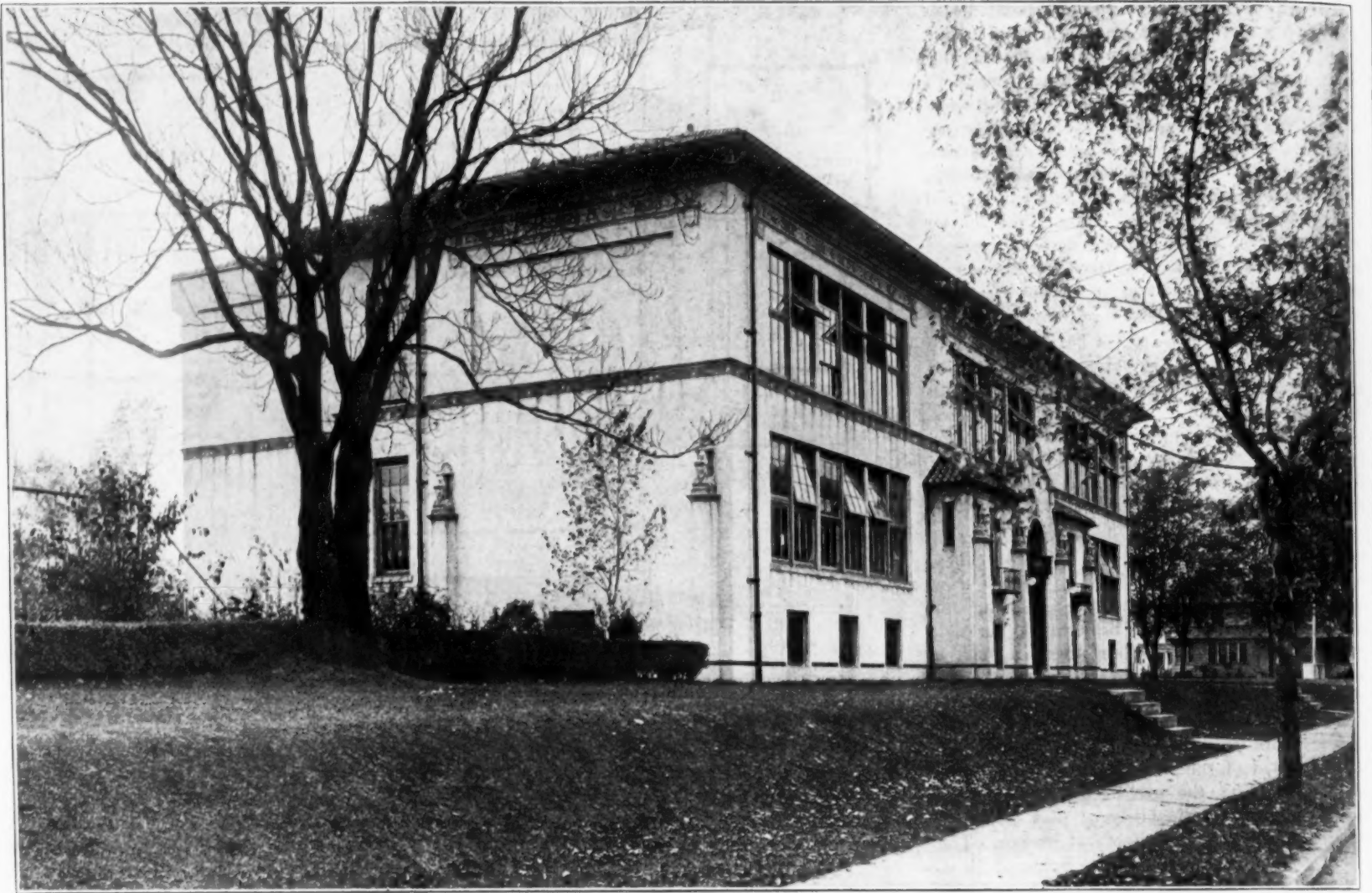
What is poor man going to do? The answer depends on whether he is interested in keeping up with woman. Woman votes. HE IS!



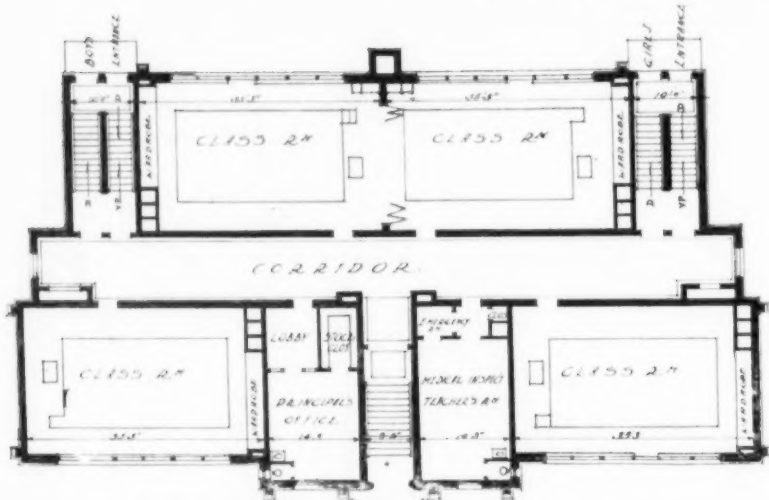
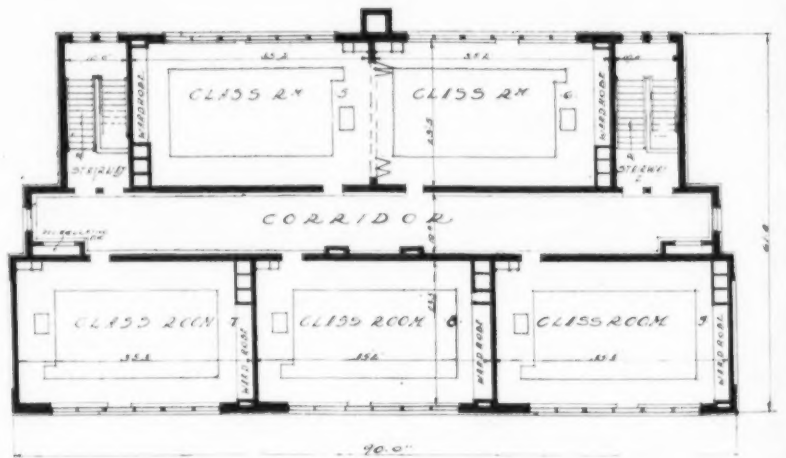
SECOND FLOOR PLAN, WILLIAM H. HATCH SCHOOL, OAK PARK, ILL.



THIRD FLOOR PLAN, WILLIAM H. HATCH SCHOOL, OAK PARK, ILL.
Childs & Smith, Architects, Chicago, Ill.



ELMORA SCHOOL, ELIZABETH, N. J. C. Godfrey Poggi, Architect.

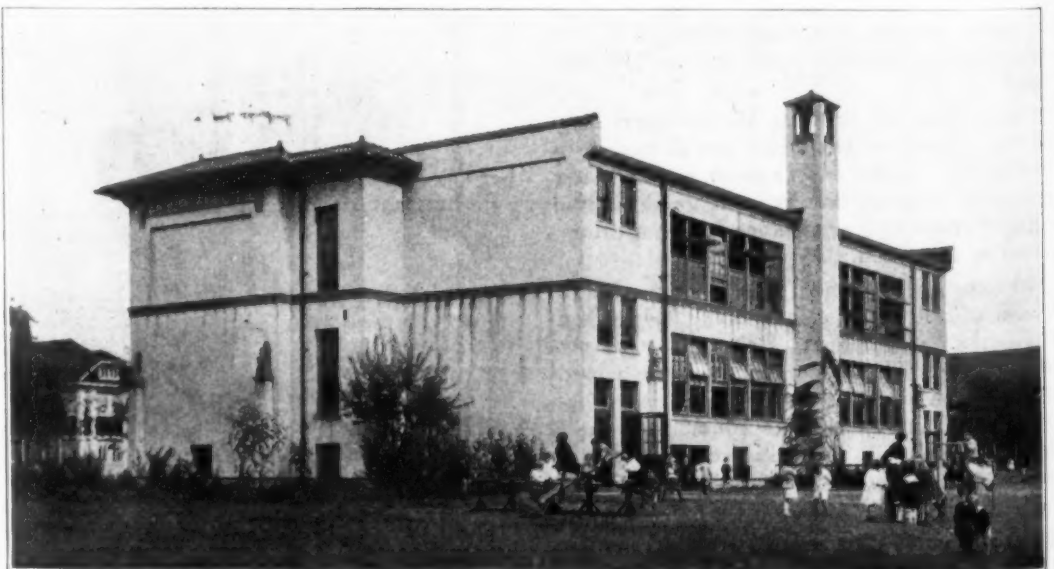
FIRST FLOOR PLAN, ELMORA SCHOOL, ELIZABETH, N. J.
C. Godfrey Poggi, Architect, Elizabeth, N. J.SECOND FLOOR PLAN, ELMORA SCHOOL, ELIZABETH, N. J.
C. Godfrey Poggi, Architect, Elizabeth, N. J.**SCHOOLHOUSE SAFETY AGAINST FIRE.**

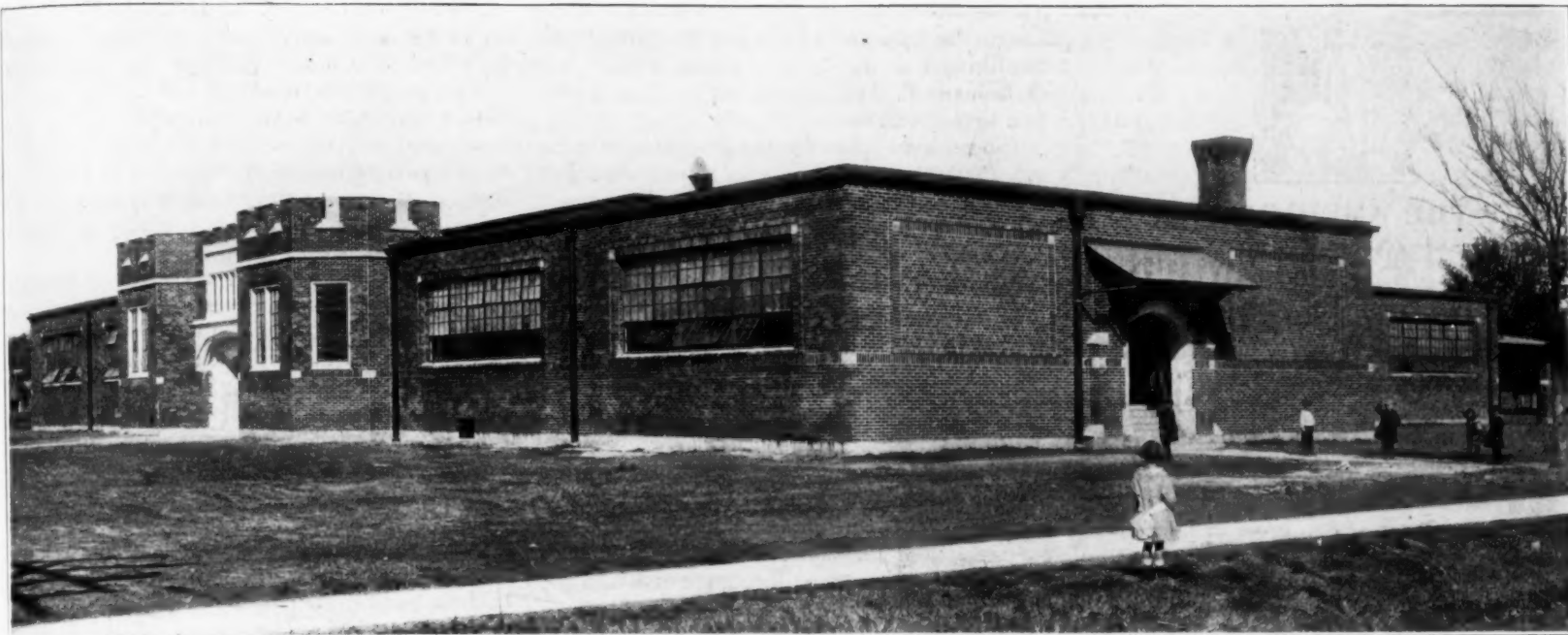
A recent issue of the house organ of the National Board of Fire Underwriters is devoted to the safeguarding of schools against fire.

It takes the position that it is high time that the American business men "gave some consideration to the subject of fire safety in the schools which their children attend. The fire hazards found in the schools would not be tolerated for a moment in a progressive business establishment."

The statement is made that a committee on safety to life of the National Fire Protection Association has declared "that 90 per cent of all school buildings are veritable fire traps." On an average, five school buildings a day are attacked by fire. Within the period of 1916-1920 a total of 9,187 schoolhouse fires were recorded, constituting a loss of \$26,302,479.

The article closes with this significant paragraph: "While the financial loss and the interruption of school work are both highly im-

REAR VIEW, ELMORA SCHOOL, ELIZABETH, N. J.
C. G. Poggi, Architect, Elizabeth, N. J.



THE PARKER SCHOOL, FORT SMITH, ARK. Chas. W. Dawson, Architect, Fort Smith, Ark.

portant, the most serious feature attending school fires is, first and always, the possibility of loss of life among the pupils. In the Collinwood school disaster, previously referred to, 173 children lost their lives, and in the Peabody, Massachusetts, parochial school fire, six years ago, 21 girls were burned to death. These are two of the more conspicuous instances where the loss of life was heavy."

THE PARKER SCHOOL, FORT SMITH, ARKANSAS.

C. J. Tidwell, Superintendent of Schools.

Parker School, as it is now organized, accommodates the six elementary grades, the upper three of which are departmentalized. The principal of this school is also principal of another 10-room school. He has a head teacher in each school, and one clerk who attends to clerical work for both schools. Pupils are grouped according to their abilities, in so far as possible, by means of intelligence and achievement tests. It is planned to use one or more rooms in this building as an "opportunity" center for three other adjoining school areas.

The building is of multi-colored mat-faced brick. The engine room and the kitchen are of fireproof material, but otherwise the building is of ordinary construction. The roof is of built-up sheet asphalt. Floors are of narrow edge-grain pine. The toilet rooms, kitchen, and auditorium are top-lighted. All classrooms are ventilated through the pupils' cloak closets at the rear of each room.

Fenestra metal sash is used throughout the building, the two upper portions of each sash being of factory ribbed glass. All windows are banked toward the rear of the room and window sills are set 48 inches from the floor.

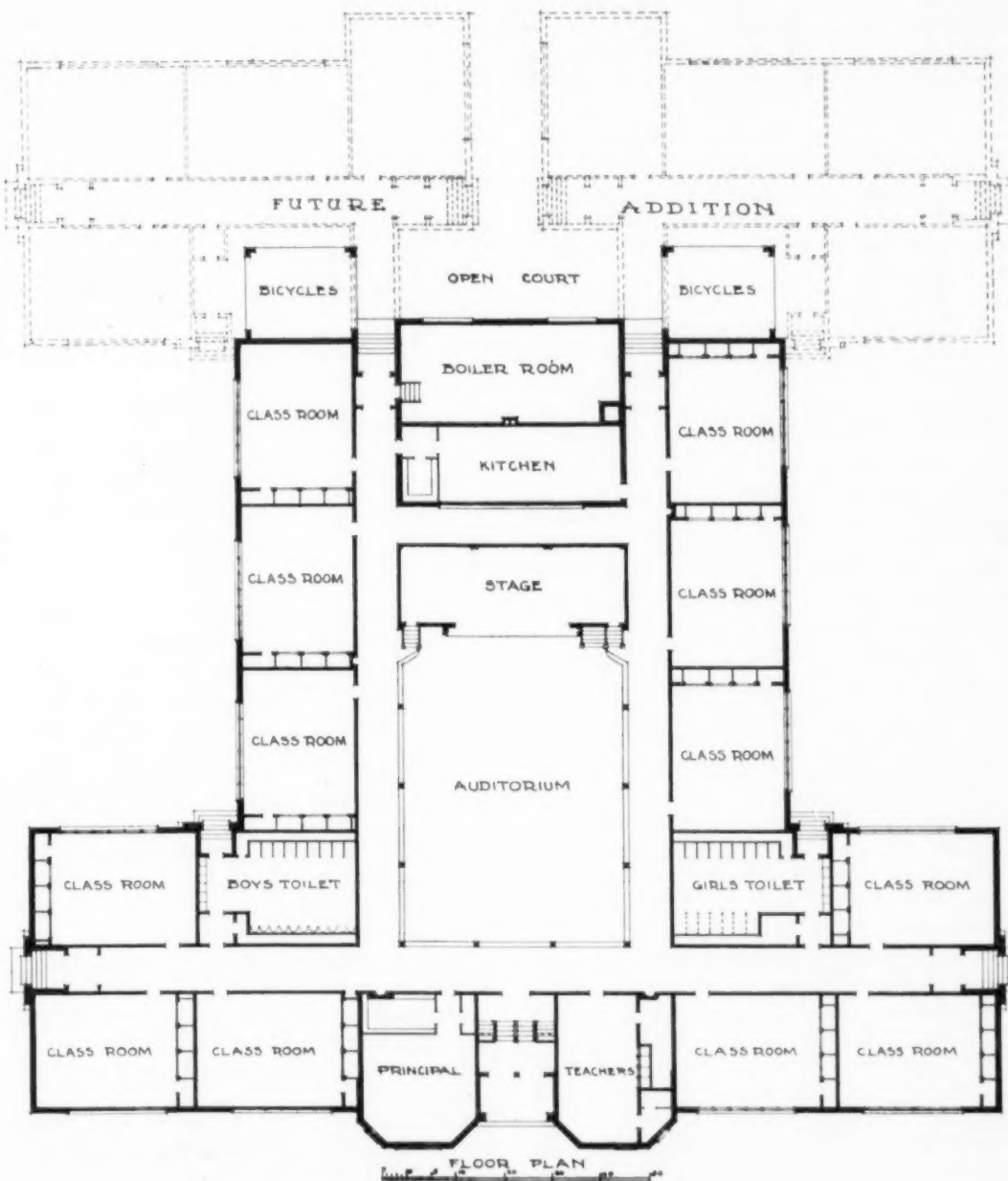
There are no walls between the auditorium and the surrounding corridors, the floors of which are twelve inches above the level of the auditorium floor. This arrangement makes it possible to use the corridors as a part of the auditorium when it is desired. Folding chairs are used to seat the auditorium, which when not in use, are stored underneath the auditorium stage.

Toilets, lavatories, drinking fountains, blackboards, and closet coat hooks are adjusted to the height of the pupils they serve.

The building is heated by steam with direct radiation in all rooms. Natural ventilation is depended upon for fresh air.

Parker School Building, Fort Smith, Ark.	
Cost of building, including architects' fee	\$78,200
Cost of furniture, including stage and cafeteria equipment	3,500
Cost of site, including grading and works	6,670
Total	\$88,370

Pupil capacity	480
Cost per pupil	\$184
Area of site, sq. ft.	135,000
Area of building, sq. ft.	25,000
Area of playground, sq. ft.	110,000
Sq. ft. of playground per pupil.	220
Seating capacity of auditorium.	400

FLOOR PLAN, THE PARKER SCHOOL, FORT SMITH, ARK.
Chas. W. Dawson, Architect, Fort Smith, Ark.



THE AMERICAN School Board Journal

WM. GEO. BRUCE { Editors
WM. C. BRUCE }

EDITORIAL

ARE SCHOOL TAX LIMITS JUSTIFIED?

During a period when gross discrepancies arise between existing school funds and pressing school needs, as this happens to be the case at this time, there is a tendency to cast about for various expedients and remedies. The school authorities, duly impressed with the mission and function of popular education, have made it plain that the future will demand an increased support for the maintenance of the schools.

One of the expedients that has recently been suggested with considerable frequency, is the removal of the school tax limit. Educators have seriously argued that the one hindrance in bringing the schools to their highest stage of efficiency is found in the limitation fixed by law upon the amount of money that shall be expended for school purposes. The contention made here is that the claims of education are primary and leading and that extravagance in school expenditures is the rare exception and not the rule. Hence, the abolition of all school tax limitations.

This contention may have the ring of appeal. It seems perfectly reasonable to hold that if, under our form of government, the training for citizenship is vital and imperative, the schools deserve first consideration. But, while the contention holds good it must also recognize the fact that tax limits have their fixed purpose and value, and that there is a vital difference between imperative public necessity and what may be deemed highly desirable by the educators.

The legal tax restrictions imposed are not only designed to afford protection against extravagance in the expenditure of public funds, but are based upon other considerations as well. They proceed upon the thought that there are other public needs besides those of the schools, and that first and foremost, there is a limit to the tax ability of a tax paying public.

The tax ability of the community is a basic consideration. It determines the limits that must be placed upon the cost of government, including the schools. The citizen who demands adequate police, fire and sanitary protection may not be entirely unmindful of the importance of education when he suggests a coordination of municipal and school needs and holds that the former are, for the time being, more imperative than the latter.

While the schools have been expanded in scope and service, government—local, state and national—too, has gone far beyond the merely protective function of a former day. It is now called upon to foster material, moral and physical wellbeing, hence, must make larger demands upon a tax paying constituency.

A typical case, in which the relative merits of the municipal and educational needs came under a severe public test, is found in the recent \$5,000,000 school bond election held at Cleveland. The money was needed for new school buildings.

The local Chamber of Commerce and the Civic League led by a most loyal and thoughtful citizenship and headed by such educational experts as Leonard P. Ayers, came out in open opposition to the bond issue.

The position taken by the protesting citizens was that the other municipal needs were just then more pressing than those of the schools, and that there should come into play a proper coordination of all public needs gauged upon the ability of the community to meet them.

The thought which controlled the minds of those who opposed the demands for the schools was that the school authorities must also appreciate the needs of other branches of government, and make their demands with a due regard for these needs.

It need not be emphasized here that all future increased support for popular education must be championed in the light of the relative as well as actual need for the same. There must also be a distinction between the imperative and the merely desirable.

When an intelligent American citizenship rises to sound the note of warning that the school costs must be subjected to limitations, just as are all other public expenditures, then it also follows that the school authorities must plan their demands in the light of relative as well as immediate conditions, if a reaction in public sentiment is not to be invited.

The demand thus far made on behalf of the schools have been loyally met by the American people, but it would be unwise to invite a reaction by submitting new and increased demands which cannot be fully justified either with the tax paying ability of locality or state, and which are not made with a due regard for tax support required to insure staple and official local and state government.

Thus, whatever may be urged against tax limitations, as applied to the support of the schools, such limitations cannot be successfully opposed when the relative importance of government and education and their cost is fully weighed in the light of a just and bearable tax burden.

THE TRANSIENT IN SCHOOL ADMINISTRATION.

One of the characteristics in American school life is the frequency with which teachers and superintendents change their positions, with a consequent brevity in tenure of service.

During the war many teachers left the service to enter upon other and more remunerative occupation. Aside from this there was a surprising shifting from community to community under the promise of better compensation and for the sake of new environment.

With the return of normal conditions and the abundance of teacher applicants the attitude in localities to reduce rather than advance salaries, has checked the shifting tendency. The employment of every new teacher, more especially in the rural districts, has demonstrated the tendency to propose lower salaries, with the result that the slogan on the part of the teachers to sit tight became generally accepted.

This situation has applied to superintendencies in a lesser degree. If changes have taken place with greater frequency, than this has really been desirable, it has been more largely due to the greater exactions made upon the office and a combination of unfortunate circumstances, than it has for a craze to seek new climes.

The modern school superintendent usually works towards a program, the realization of which involves years of time and thought. Knowing that every new field requires new tilling of the soil before the harvest is reaped, he is not looking for successive or frequent

changes. To be sure, he is usually open for wider fields of activity, but to these he must be called. He is not reaching out after them.

The promotion tendency, from the smaller to the larger units of population, is a wholesome one, and speaks well for the disposition on the part of boards of education to recognize meritorious service and an effort to bring to the superintendency office the highest obtainable ability.

This does not, however, tell why the changes are so frequent. Some years ago the average official tenure of the school superintendent was three years. Some had been in office too long, but many more had hardly been given a chance to demonstrate their worth. There was the conservative community that held on to a good superintendent for a quarter of a century, while the erratic city proved itself a veritable superintendency graveyard.

On the whole, the superintendency tenure has been lengthened, but there is reason to believe that the number of changes engaged in are still more frequent than legitimate conditions warrant. If one were to estimate the competent men who were removed without sufficient cause against the incompetents who are still in office, the result would probably show that the former outnumber the latter.

If this be true then it also follows that the insecurity of superintendency tenure is due to the exigencies, which beset the office rather than the weakness which may afflict the man. The combination of executive and educator ability, which the office demands may be rare, but the task and skill in dealing with a vexatious combination of circumstances in instances demands the diplomacy and craftiness of the superman.

There is no doubt that, as the result of weakness here and there on the part of both superintendents and school boards, shifts and changes are engaged in which are in some instances beneficial and in others harmful.

It is not claiming too much to hold that those who aspire to the career of a superintendency must cultivate in a greater degree than ever the calm and circumspection which make a leader of men as well a schoolmaster.

On the other hand, there must come to many school boards of this country a higher appreciation for the superintendency office and a better understanding of the relations that must be maintained between the two if the desired stability and efficiency is to be achieved.

FINANCIAL INDEPENDENCE OF SCHOOL BOARDS.

The arguments in favor of divorcing the school boards from the domination of city councils and placing them on a basis of financial independence are generally agreed upon by experts and students in the field of school administration. The spectacle of a mayor and a city council determining what salaries shall be paid to superintendents and teachers, what kind of architecture shall guide the construction of the next new school building, and thus, in many instances, determining the character of the school, has been seen too often.

In several of the New England states, as well as the state of New York, the school boards will seek legislative relief from city council control of the school finances. It has become more clear in recent years that a board of education, in order to determine the kind and the quality of schools, must be in control of the financial affairs.

The one argument which has not been advanced with any degree of force in favor of the separation of the school boards and city councils is the one which deals with baneful political activity. Where the school interests are dependent upon aldermanic favor or upon the

good graces of a mayor's office, politics are bound to find their way into the board of education. When it is within the province of an alderman to vote for or against a school budget item, and within the powers of the mayor to veto all of them, then it also follows that the board of education is not in control of the school system. In seeking to obtain what the schools are entitled to political maneuvering is bound to be resorted to. Call this baneful or beneficent politics—but politics it is.

This situation is bound to invite suspicion, crimination and recrimination, as was recently instanced by a New England city. Before a school board election the mayor advised the people how to vote. He had sanctioned an increase in the salaries of the teachers and vetoed the salary of the superintendent. "If you want a politician at the head of the schools vote for the present incumbents" was the mayor's public statement, "if you want to support your teachers then vote against them. There is no official getting his money more easy than the superintendent."

Whatever the merits of the controversy between the mayor of the city and the superintendent may be, it follows that such fights are not for the best interests of the schools. If in the judgment of the mayor the school superintendent has become a politician then the system which establishes their relations has probably made him so, and it is merely a contest for supremacy between two politicians. Or, better still, if the schools are to get all they are entitled to, then the school superintendent must be a politician who is fully as adroit as is the mayor.

But, all this is regrettable. Only an absolute separation between school board and city council can eliminate politics of an objectionable kind from the administration of the schools. The school board being usually an elective body, is directly responsible to the people, and should not be compelled to crouch to officials of the municipal government for the things that rightfully belong to the schools.

THE TRANSIENT REFORM SCHOOL BOARD.

Not unlike a popular dramatic production which has its season of popularity a board of education may have its tenure of service and then find itself ousted from office. A change in the personnel is sometimes a good thing, and then again the mere desire for a change may drop some old and replace them by new members, and that may be a bad thing.

When the school administrative activities have had a season of rocky travel, and the taxpayers have become disgruntled, the suggestion of a house cleaning usually meets with popular acclaim. The reform school board is welcomed, and goes into office with a hurrah and a bang.

And what follows? The new members who have hitherto seen things from the outside, now begin to see things from the inside, and then wonder where the reforming job is to begin. Conscious of an obligation to the people, to do something startling and epoch making, they stand in danger of doing something that is diametrically opposed to the interests in hand.

Those who approach their task with an open mind and with common discretion and judgment usually discover that the school system is the achievement of many minds and of many years and that the genius who can over night inaugurate startling and wise reforms has not yet been born.

We recall an instance where a prominent man in a certain city denounced the local school board in the fiercest terms. He could suggest a dozen reforms that could be inaugurated

immediately, and according to his notion it was high time that somebody got into the board that knew what was what. The sudden turn of fate and the political exigencies of the situation somehow elected him to the school board.

And now all eyes were upon the intrepid reformer. Something was sure to drop now. At last a real fellow was on the job.

And what happened? For the first six months the reformer was silent. He was learning something he had not known before. The superintendent whom he had threatened to fire, proved at close range a capable man. The course of study which he had denounced as a hodge-podge was quite a formidable document. The corps of teachers who had been designated as a "lazy bunch", proved to be a conscientious and able body of workers.

At the end of a year he quietly cooperated with his associates on the board, appreciating the fact that all of them were striving like himself to advance the best interests of the schools. He was thankful that he had heeded an old member who advised him "to look before he leaped."

At Indianapolis, Indiana there was a movement a year ago for a school board elected on a reform platform. The old board which was charged with overriding public opinion was dropped like hot iron, and the new was swept in with great enthusiasm. At the end of a year's service the Indianapolis News mournfully says: "To all intents and purposes the school board is being conducted now exactly as it was during the time the old majority faction ruled. The three who now form the majority faction favor the things that the repudiated members stood for."

It is not our purpose here to defend the new and condemn the old, or vice versa. Perhaps, the new board found that the old was not altogether wrong. But, whatever may be the inside facts in this case, it nevertheless follows that the reform idea frequently implies the impossible. Moreover, it may prove to be a mere figment of the mind which under high sounding phrases elaborates itself into huge proportions and promises a desired turning over of the established order of things.

Experience always remains the best teacher. In this instance it teaches that a revolution in American school administrative effort is neither timely nor possible without destroying the great work that has gone before, and which has lent stability and efficiency to the schools of the nation. Minor changes and improvements are always in order. Big reforms are out of the question.

THE IMPORTANT MAN ON THE SCHOOL BOARD.

In any group of a half dozen or dozen men there are always found the positive and negative characters, and between the two extremes are found the less pronounced in manner and method. There are those who propose and those who dispose, those who affirm and those who deny, those who yield and those who hold stubbornly to the end. In the shuffling and sparring on project or problem, the feasible, practical, and expedient must eventually come to the surface, and in the end come to a common conclusion.

The process of inquiry and of analysis, and of correct conclusion, is facilitated in the degree that the group personnel possesses intelligence and experience on the problem in hand or in the practical affairs of life. Superfluous verbosity and wrangling are eliminated where ready perception and practical judgment are brought into play.

In the nature of things every group of men has its guiding spirit, and this is as true of

boards of education as it is of other bodies having important affairs entrusted to their charge. The man who possesses greater penetration of mind with incisiveness of action and words, together with sincerity of purpose, will make his impress upon his associates. He has the elements of leadership.

In the desire to elevate the best men in the community to school board honors, there is also the tendency to secure those who have made a record for themselves in the field of commerce, industry and professional work. At times the big man is wanted. Things may not have gone smoothly and the acquisition of the captain of industry or the top notcher in the professional field is suggested.

Here it too frequently follows that the prominent banker, the successful merchant or manufacturer, the popular lawyer or physician, are usually too busy to accept a school board membership. In Chicago recently a membership in the board of education was declined by a half dozen bankers, merchants, manufacturers and professional men—all too much engrossed with their own affairs to accept public duty. At the same time Philadelphia secured the acceptance of a great business executive to school board service. Occasionally the so-called big man in business will make a sacrifice, and as a duty of citizenship serve the community by accepting school board honors.

There is one aspect to this situation, however, which must not be overlooked. The strong executive, as exemplified in the business world is a desirable factor, but the board of education, in its relation to the American system of popular education, is a democratic institution. While it calls for the best impulse of the community, and the service of the most talented men and women, it also calls for a division of representation that shall reasonably reflect the citizenship of an entire people.

A school board made up entirely of bankers, or of manufacturers, of lawyers, doctors, or any one class of business or professional men would not be representative of an entire community. Nor is it likely that such a body would grasp the educational wants and desires of an entire constituency, or serve to anchor the average citizenship to a sustained interest in the schools.

The average citizen of good character and reasonable intelligence, who is abreast of the mass sentiment and who understands the needs and aspirations of a common constituency is equally indispensable in giving balance and momentum to school administrative service. He may not possess the elements of leadership, but he completes the representative character of the board if the interest of the general public is to be sustained and the schools are to remain the concern of all the people.

CHATS DURING RECESS.

A Kansas teacher, married, attended a dance given by the parents of her pupils in her schoolhouse. She will teach no more. The school authorities of that state refuse her permission to teach, not because they consider dancing immoral, but because she used "bad judgment". Well, that's different! We thought probably that she was a clumsy dancer.

Recently the Topeka (Kans.) school board named a new schoolhouse after an undertaker, formerly a prominent citizen and now deceased. But the undertakers of the city have protested against the board's action.

—Everything is lending itself to campaign weeks—safety, education, flowers, apples, prunes, etc., etc. And now somebody calls for a "correct speech week." Good! If anybody shoots off his mug in bad grammar give him a jab in the smeller!

Meeting Today's School Needs With Mechanical Ventilation

C. A. Eddy

It seems a far cry from an atmosphere of snow-capped mountains and crystal lakes to the atmosphere which exists in many schoolrooms. As far as distance is concerned, it may be thousands of miles from the mountain and lake regions; but as far as beneficial effects are concerned, it is now possible to secure the same invigorating effects in the schoolroom as would be possible among the mountains and lakes.

This may seem like a strong statement, but the purpose of this article is to show how mechanical ventilation fits in with the needs of the modern school and how the right kind of ventilating system with the pure air of the snow-capped mountains and the sparkling lakes is available in the school at all hours.

The very foundation of the school system is the child's health. Without healthy children the finest teaching equipment avails nothing. No matter how much money is spent on furniture and fittings, how much time and effort are put on the curriculum, if the spectre of ill health is always stalking about among the pupils, that school cannot be considered a success. Children are not getting a fair chance and the facts must be faced and reasons why known.

The basis of good health is pure air, good food and pure water. All three are vital, but pure air comes first in its importance to the child's health. The furnishing of this same pure vitalizing air during school hours is distinctly up to the school officials. When we have reached that point, we have brought out something most far-seeing school officials realize as facts. Many know that their own schools are lacking in perfect ventilation and are broad enough to be looking about them for ways and means of correcting it.

Ask the average man his ideas on healthful ventilation. He will scratch his head, give an imitation of a man doing some heavy thinking, and after a bit is liable to say, "Well, I should think that plenty of fresh air from out doors would be all right. When we are out doors, we have to breathe out-door air. Why isn't this all right for people indoors?" If he has had to do with ventilation in something more than a general way, he will realize that getting fresh air in the schoolroom *somehow* is not always a satisfactory solution to the question, and this brings us to the point of what is a happy dependable medium and a correct solution to ventilation in the school today.

We never used to think much about the physical side as applied to education. As far as exercise in the school was concerned, there



MOUNT AUBURN GRADE SCHOOL, DALLAS, TEXAS. W. B. Ittner, Architect, St. Louis.

was a happy-go-lucky, catch-as-catch-can method; each child got whatever exercise he could in his own way. Now, we have systematic exercises, because we know that system in exercising is, after all, the right way to handle this end of the child's education. We now know that the physical side of the child as applied to education has a tremendous bearing on his advancement and that is why no pains, efforts nor expense have been spared, to provide those things which go toward the upbuilding of physique, and enter largely into the moral side of a child's training. A few years ago we would not have thought of extensive gymnasiums, elaborate swimming pools, manual training classes, cooking and sewing schools, etc. These are more or less common today in the school that is worth while and are considered indispensable to the school designed to give the child the most during school age.

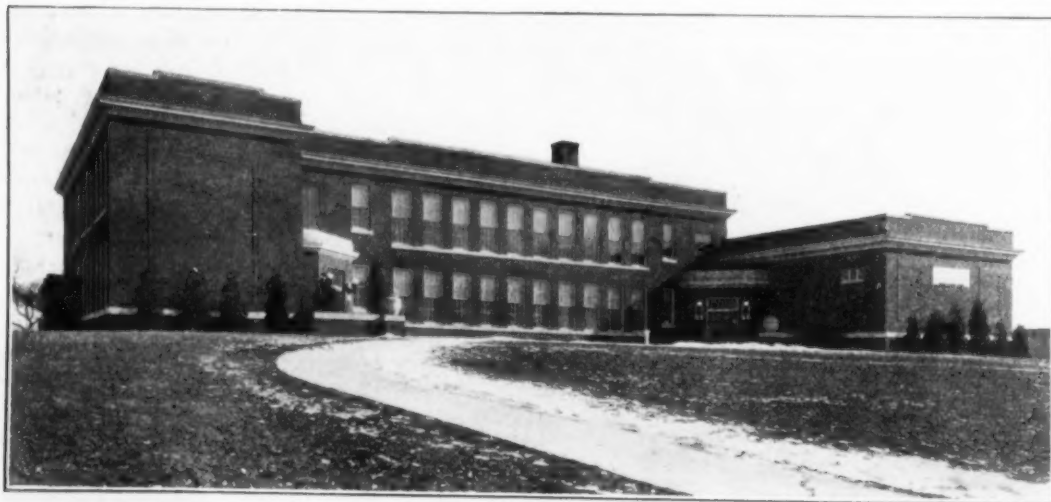
It is only natural that these things should be taken up, just as it is natural that the indispensable automobile, the space-annihilating aeroplane and other twentieth century developments should have been brought to their present efficiency. We do not think of these things now as new, but consider them a part-and-parcel of our daily lives. And just so long as people want to progress and go ahead, just so long will new things take the place of those which formerly we thought good enough. The same thing ap-

plies to the question of ventilation in the school. It is not to be expected that all members of all school boards have the time or opportunity to get into this vital subject in such a manner as to enable them to see to the bottom of the entire proposition. Many do not realize to just what an extent mechanical ventilation is serving modern schools and what rapid strides it is making in those places where sufficient study and tests have been made, to prove the real advantages of this system.

It is interesting to talk with various members of school boards in scattered sections of the country and get their ideas on this subject. The officials who have taken the time and have had the opportunity of really studying this subject, realize the forward strides that have been taken toward mechanical ventilation in the school, and are "sold" on the matter. They realize that mechanical ventilation is a logical method of getting fresh, pure air into the schoolroom without danger of drafts, and the inconvenience which comes from so-called natural methods of ventilation.

You can no more compare the modern mechanical ventilating system with the ordinary methods, than you can compare the efficiency of the present street car heating and ventilating system with their heaters and blowers in the front end of the car circulating warmed air, and the outlet at the top for foul air to escape, with the old antiquated method with its tumble-down coal stove in the center of the car and foul air escaping only when the doors were opened. The modern ventilating system with its air washer, fan and heating coils, draws the air from out of doors, passes it through sprays of fresh water, thus eliminating the dust and dirt from the air, and then blows it over heating coils, where it is circulated to the various rooms, purified, freshened and warmed to the proper degree for health and comfort. Opening schoolroom windows, on cold blustery days particularly, causes dangerous drafts and discomfort, let alone admitting clouds of dust and dirt.

Furthermore, fresh air does not necessarily mean pure air, whereas the air that has passed through an air washer is within a few degrees of being absolutely pure, and that is why the



PROSPECT SCHOOL, JACKSON, MICH.



"Something new under the sun!"

The exclamation of welcome that greeted the first announcement of the epoch-making Victor plan for an intimate study of

The Instruments of the Orchestra by Sight, Sound and Story

18 charts (14" x 22"), showing the instruments in absolute accuracy of color and detail.

Two double-face Victor Records (35670 and 35671 or 35236 and 35237), giving the tone quality of every instrument.

A handbook containing full description and history of the instruments and their uses by composers.

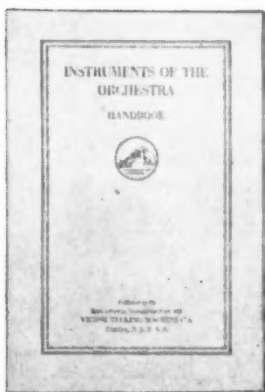
A New Revised Edition Now Ready

(Illustrations on one side of card only)

List price of charts (including handbook)	50	\$5.00 a set
List price of separate handbooks	35	.35 each
List price of records	25	1.25 each

For further information consult any dealer in Victor products, or write

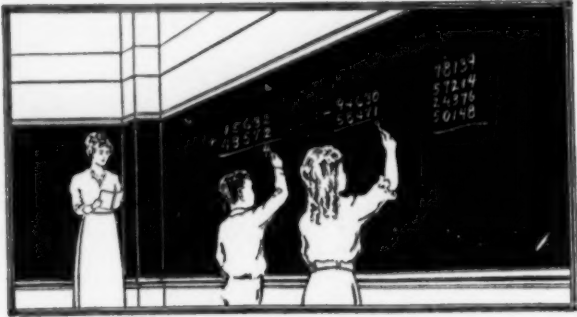
Educational Department
Victor Talking Machine Company
Camden, New Jersey



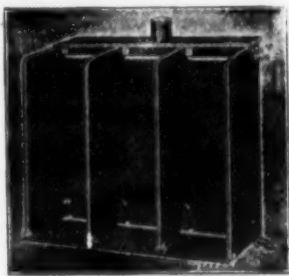
ALBION QUARRY NATURAL SLATE BLACKBOARDS

Are Black and stay Black. The only PERFECT writing surface.

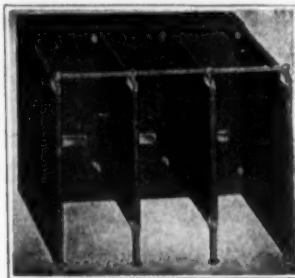
Sample and Booklet sent on request.



The "KEENAN KIND" Sanitary Slate Fixtures provide perfect Sanitation and Ventilation.



B-11 1/2 S—Urinal



B-26—Closet

Large Illustrated Catalog for the asking

KEENAN STRUCTURAL SLATE COMPANY, Inc

First National Bank Bldg.,

BANGOR, PA.

BUYING WITHOUT REGRETS

The "law of compensation" is relentless.

"Nothing for Nothing" applies in every realm of effort. But the man who makes an unwise purchase buys something that—like a deficit, is less than nothing; for it requires additional outlay in later years.

NATURAL SLATE BLACKBOARDS

from our quarries represent the acme of economy and educational efficiency. They require no upkeep, while artificial boards must be resurfaced, repaired and replaced regularly. In comparison, the word "economy" is defined in its truest sense. Slate being non-porous does not absorb anything, so cannot disintegrate. It is finished with a beautiful, velvet smooth surface that does not become gray with age or use; that makes writing a pleasure and reading a relief to the eyes of the students and teachers. That is why our Natural Slate Blackboards combine the utmost efficiency with the utmost of economy.

These are but a few of the advantages. Before you spend a dollar for Blackboards, you should read our book "How to Judge, Specify and Install Blackboards." Send for it today.

Penna. Structural Slate Co.

Worth Building

Easton, Penna.

(Concluded from Page 68)

open window system of ventilating is antiquated, unsatisfactory and unhealthy, and this is also the reason why mechanical ventilation with its certain satisfactory results is taking the place of older methods.

Mechanical ventilation means controlled ventilation. The proper humidity in the room is a vital point and has a tremendous bearing on the health of pupils and teachers. With a temperature kept below seventy degrees, the humidity should be always above fifty per cent. And controlled ventilation assures your room the proper humidity, as well as an abundance of pure, fresh air.

The question of proper humidity is overlooked altogether by the opponents of any system of mechanical ventilation. They talk of "baked" and "scorched" air in connection with the heating coils used, whereas such coils only serve to warm the air. All the freshness of outdoor air plus the elimination of a large amount of impurities washed from the air is an advantage which a washed air mechanical ventilating system supplies.

Many prominent national magazines are publishing lengthy articles on the value of proper humidity of the air in the home, school, church, etc. Doctors are making a more thorough study of the subject and are recommending that along with an adequate supply of fresh air, care must be used to see that the air is of the proper humidity.

There are three important factors involved in a settlement of the question of school ventilation—temperature, humidity and air motion. These factors have an important relation one to the other. It is conceded that a temperature of eighty degrees is not too warm, if a gentle breeze is blowing. That is, a comparatively

high temperature accompanied by air motion will be as comfortable as a lower temperature and the air not moving:

A third relation of importance is easily determined if the moisture in the air, that is, if the relative humidity is too high, perspiration does not evaporate from the body, and we are uncomfortable for that reason. The close, oppressive day in summer is when the humidity and the temperature are both high and the air is not in motion. If the humidity goes down, the temperature can go up, and we are still comfortable, the hot, dry day being less oppressive than the same temperature when the air is moist.

A recent report says: "The advocates of natural ventilation for school classrooms, of cloth screens, patent window ventilators and the like, are all laboring under a common misconception of the true meaning of the word ventilation. The theory that all that is necessary to ventilate a schoolroom is to admit air from the outside, and the more air admitted the better the ventilation, is antiquated and obsolete. Air quantity is by no means the entire story. It must be of a certain standard

THE ELEMENTARY SCHOOL PRINCIPAL.

It is also true that the public must place a higher estimate upon his work as a part of national and social life and not regard it merely as an incidental in the lives of children. A change of attitude is slowly but surely taking place. The principal can hasten the process by contact with his community, by quietly and modestly magnifying his work in every legitimate way. He must realize, as we all must, that "it is not in our stars but in ourselves that we are underlings" and by outstanding leadership bring the community and society to accord the respect and recognition and honor due him and his work.—David B. Corson, Superintendent of Schools, Newark, N. J.

of purity with respect to dust and bacteria. It must be introduced at a comfortable temperature, depending upon the amount of moisture it contains. The air motion must be sufficient to remove the aerial envelope about the body, but not sufficient to cause drafts. The air must be free from objectionable odors and it must be properly distributed to and through all parts of the room.

It is folly to argue that natural methods of ventilation of the schoolroom will meet these requirements. With such a method the air must be taken as it is found with its dirt, dust and bacteria, the quality depending upon the location of the school, the condition of the streets and neighborhood, the proximity of factories, etc. The noise from street, office or other outside agencies cannot be excluded with it. Artificial humidification and humidity control would, with this method, require separate apparatus, expensive and inefficient. Furthermore, the air could not be distributed through all parts of the room without exposing those pupils near the windows to drafts."

Modern ideas are taking the place of the thoughts of the past. The little red schoolhouse has passed into history and it is doubtful whether any of us would today be satisfied to have our children go to school under conditions which prevailed in the olden times. Surely, with the thought and care which have been given to making the school better, the child of today has an advantage which was unthought of a few years ago. This applies to a great many things in school construction, and applies with particular force to the strides made in proper ventilation, and mechanical ventilation is becoming recognized as a greater factor as the days go by.



Gray unglazed Terra Cotta

EVANDER CHILDS HIGH SCHOOL
NEW YORK, N. Y.

C. B. J. SNYDER, Architect

PROUD *of their* NEW SCHOOL

"ALL the neighborhood is very proud of this school building," writes the Principal of the new Evander Childs High School, New York City. And well the neighborhood may be proud of it, for it is a worthy monument to public instruction — a building of dignified, beautiful architecture.

There's a pleasantness about this school that undoubtedly attracts students to it. It has the architectural charm of the French Renaissance, handsomely interpreted in brick and Terra Cotta. Its decorative features—mullions, quoins, cornice, window trim, and interesting finials — all of Terra Cotta, everywhere enhance the attractive lines of the building. The soft gray of the Terra Cotta harmonizes delightfully with the brick field of the walls.

When it comes to selecting material for trim and ornament on modern schools, Terra Cotta is almost invariably first choice. It is particularly well suited to school architecture. Its plasticity and unlimited scope for color and ornament permit the construction at moderate cost of architecturally beautiful schools. Moreover, it is permanent, fire resistant to the utmost, and unchanged in texture or color by age or weather.

We should like to show you what Terra Cotta has achieved for thousands of schools all over the country. Let us send you our attractive brochure, "Present-Day Schools." It tells a very interesting story. Address **National Terra Cotta Society**, 19 West 44th Street, New York, N. Y.

TERRA COTTA

Permanent

Beautiful

Profitable

THE "EMPIRE" QUALITY

VISIT OUR BOOTH AT CLEVELAND

during the N. E. A. Convention, February 26th to March 1st, 1923. A complete line of the Empire Quality Line of School and Auditorium Furniture will be on exhibit.



PORTABLE CHAIR No. 500

The roll seat and high back with reverse curves are absolutely form fitting and assure a most comfortable Veneer Portable chair. The No. 500 is made of 5 ply three-eighths inch veneers and finished in dark brown.

In your Auditorium the No. 500 Portable Chair will give years of service and satisfaction.



THE E. L. GROVER CO.,
137 East State Street, Trenton, N. J.
SOUTHERN SEATING CO.,
121 Chartres St., New Orleans, La.
WEST VIRGINIA SEATING CO.,
Huntington, W. Va.
THE MILLS COMPANY,
308 Jacobson Bldg., Denver, Colo.
KENNEY BROTHERS & WOLKINS,
224 Congress St., Boston, Mass.
SOUTHEASTERN SEATING COMPANY,
Rhodes Building, Atlanta, Ga.
SOUTHERN SCHOOL SUPPLY CO.,
Raleigh, N. C.

Aug. 22, 1916
Patented July 3, 1917
Feb. 18, 1919

SIDE VIEW.

The "EMPIRE" Movable and Adjustable Chair Desk



The "Empire" Movable and Adjustable Chair Desk is permanently expressive of both quality and durability in every detail. It is hygienically designed and exceptionally well built—each unit designed to insure a maximum of comfort, long life and service with the utmost of economy and efficiency in use. And because of its superior strength of construction, its exclusive adjustments and unequalled appearance, the "Empire" Movable and Adjustable Chair Desk is absolutely essential to efficient and progressive teaching.



PORTABLE CHAIR No. 525

This Portable Chair No. 525 is built for comfort and service. A reinforcing thin strip across the back adds strength. For a good, substantial medium priced portable chair, specify No. 525.

TABLET ARM CHAIR No. 25

Is built like the Empire Movable and Adjustable Chair Desk, being reinforced by eight concealed steel tie rods running directly through the chair. This means great strength and service.

The Tablet Arm is so constructed to allow pupils to write to bottom of tablet without the chair back interfering.

DISTRIBUTORS

ILLINOIS OFFICE, Henry L. Fowkes, Mgr.:
Taylorville, Ill.
KANSAS CITY EMPIRE SEATING CO.,
Interstate Building, Kansas City, Mo.
STEWART SALES COMPANY,
Rialto Building, San Francisco, Calif.
CLEVELAND OFFICE:
308 Prospect Bldg., Cleveland, O.
HOUSTON SHOW CASE & MANUFACTURING CO.,
Houston, Texas.

NORTHWESTERN SCHOOL SUPPLY CO.,
1401 University Ave. S. E., Minneapolis, Minn.
SYRACUSE OFFICE:
1417 N. Salina St., Syracuse, N. Y.
W. J. McILWAIN,
Little Rock, Ark.
SOUTHWESTERN EDUCATIONAL EXCHANGE,
Korber Building, Albuquerque, N. M.
NOLLA & MORELL,
Gonzalo Marin No. 17, Arecibo, Porto Rico.
PITTSBURGH OFFICE, H. Keefe, Mgr.:
921 Bessemer Bldg., Pittsburgh, Pa.

'QUALITY LINE

able and Adjustable Chair Desk

Any child can adjust the "Empire" Chair Desk with the utmost ease. The adjustments are strong, but very simple in construction — absolutely nothing to get out of order.

Standardize on "Empire" Movable and Adjustable Chair Desks for your schools. They are the most practical, durable and economical.

They are made in six sizes to fit the various grades and have five adjustments so that each pupil may be individually fitted.



Patented Aug. 22, 1916
July 3, 1917
Feb. 18, 1919

REAR VIEW.

SEE THE EMPIRE QUALITY LINE

of School Furniture at our exhibit at the convention of the National Education Association at Cleveland, Ohio, February 26th to March 1st, 1923.

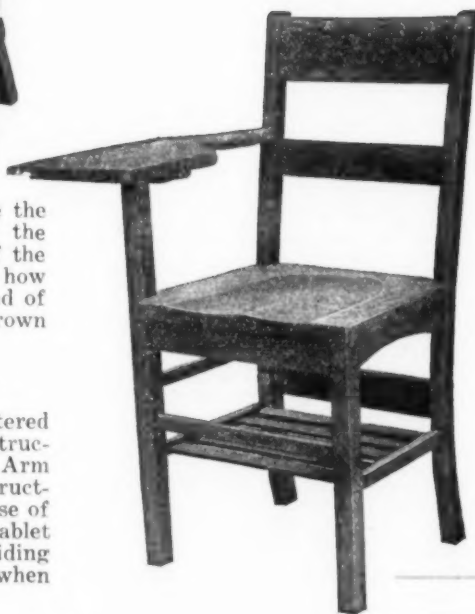


PORTABLE CHAIR No. 535

Features of worth on Portable Chair No. 535 are the malleable hinges which hold the weight instead of the screws and binders and the screw and belt fastening of the seat. This means absolute permanency, no matter how many times the seat is banged or jarred. Constructed of maple or oak as desired, and finished in dark brown or dark golden oak.

TABLET CHAIR No. 17-R

Manufactured of quartered oak with heavy bolted construction, this No. 17-R Tablet Arm Chair is designed and constructed to stand the use and abuse of the schoolroom. The Tablet Arm is 10x23 inches, providing support for the entire arm when writing.



PORTABLE CHAIR No. 505

Many years of experience in what is most essential in a portable chair have developed the No. 505, a most practical and economical Portable Chair. Its construction is rigid enough to insure long, hard service. The weight does not rest on the binders as in most portables, but is firmly held by malleable hinges. This strengthens the whole construction.

SUPPLY CO.
Minneapolis.

se, N. Y.

ONAL

que, N. M.

ecibo, Port

ceefe, Mgr.

argh, Pa.

EMPIRE SEATING CO.

ROCHESTER, N. Y.



Lowell School, Seattle, Wash.
Sound-proofed with Cabot's Quilt.
Edgar Blair, Architect, Seattle.

Sound-Proof Schoolrooms.

Civilized school-house construction now recognizes sound-deadening in floors and partitions as a necessity that is second only to light and ventilation. Quiet rooms are essential for both pupil and teacher.

Cabot's Quilt

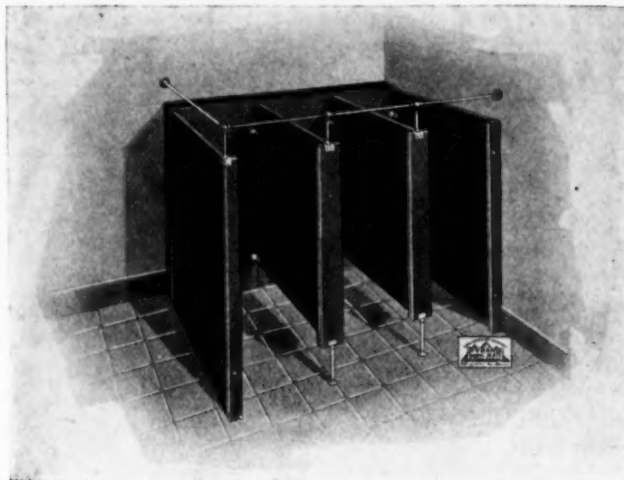
is the standard deadener—sound-proof, sanitary and fire-resistant.

Sample of Quilt and book on School-house deadening sent on request.

Samuel Cabot, Inc., Mfg. Chemists, Boston, Mass.

342 Madison Ave., N. Y., 24 W. Kinzie St., Chicago.

TOILET ENCLOSURES



"PYRAMID" BRAND

Slate perhaps more than any other material lends itself most advantageously to the construction of Toilet Enclosures. The many plumbing uses of slate are detailed and illustrated in Chapters 5, 6 and 7 of a Series on Structural Slate. Any or all of these Chapters will be mailed upon request.

The purpose of these Chapters is to make readily available to Architects, School Officials and Contractors standardized sizes and the methods of construction by which Structural Slate may be effectively, quickly and economically installed to meet sanitary and practical requirements.

THE STRUCTURAL SLATE CO.

Pen Argyl, Penna.



School District Government.

In considering appeals from the county superintendent, the county board of school trustees act as a quasi judicial board, and their decisions are in the nature of judgments, and should be so construed.—Davis v. Hemphill, 243 S. W. 691, Tex. Civ. App.

School District Property.

Under the Iowa code, § 2816, providing that, when real estate is not used for school purposes for two years, it shall revert to the owner of the tract from which taken on repayment of the purchase price, together with the value of the improvements, such owner may renounce the right given and refuse to exercise his option, in which case the district's title is relieved from the cloud of a possible reversion.—Consolidated School Dist. of Ellsworth v. Thompson, 189 N. W. 803, Ia.

Where, after the abandonment of a school-house site, the owner of the tract from which it was taken informed the directors that he did not buy or bid on the lot, and the schoolhouse was thereupon sold, and the lot put up and struck off to him, but he refused to pay his bid, and asserted title under a quit claim deed from a former owner's heirs, he renounced and relinquished his right to the reversion on the payment of the purchase price with the value of the improvements, under the Iowa code, § 2816.—Consolidated School Dist. of Ellsworth v. Thompson, 189 N. W. 803, Ia.

As the Texas special and local laws, 37th legislature of 1921, c. 40, § 18, creating an independent school district, provides in effect that the board of trustees are authorized to purchase building sites and to erect thereon, furnish and equip needed school buildings in the district, the trustees of such a district, in determining that a new site should be selected, and in proceeding to purchase it and erect a building

thereon, acted within their legal authority.—Davis v. Hemphill, 243 S. W. 691, Tex. Civ. App.

County trustees in deciding that district trustees were within their powers in establishing a new school site, but that they used bad judgment in not referring the contemplated change to taxpayers and patrons of the school, and recommending that this be done, upheld the legality of the local board so that taxpayers could not question it, though the controversy arose as to matters properly involved in an appeal to higher school authorities.—Davis v. Hemphill, 243 S. W. 691, Tex. Civ. App.

School District Taxation.

Where a new school district was carved out of an old one, a certificate of indebtedness, given by the new district after an adjustment of the assets and liabilities of the old district, is not an increase of indebtedness nor the creation of a new debt, and hence does not violate the Pennsylvania constitution, art. 9, § 8, providing that no school district shall incur a new debt or increase its indebtedness to an amount exceeding two per cent of the assessed value of the property, without the consent of the electors.—School Dist. of Pittston Tp. v. School Dist. of Borough of Dupont, 118 A. 308, Pa.

Where with the approval of a popular vote, a county had established and was maintaining public schools and levying a tax of five mills on the dollar, the county commissioner is held not authorized, under the constitutional amendment of 1920 (laws of 1919, p. 66), to levy a further tax on a recommendation of the board of education, as the tax levied by popular vote continues until changed by a recommendation of the board within the limits fixed by the amendment.—McMillan v. Tucker, 113 S. E. 391, Ga.

The trustees of a school district had no authority under the Texas constitution and laws to declare the result of an election to levy a tax illegal and void, and their declaration to that effect is not binding on anyone, since the district court alone has jurisdiction over the contest of an election; a "contest" meaning a suit in which the validity of the election or the correct ascertainment of the result is the subject matter of litigation in a court having jurisdiction to hear and determine such issues.—Stephens v. Dodds, 243 S. W. 710, Tex. Civ. App.

If the trustees of a school district made an order for an election to levy a tax not authorized by the Texas constitution and Laws, and for a purpose not recognized by the laws as within their power, their order was a nullity and subject to collateral attack at any time or by any person, and did not bind the trustees any more than any other person, so that the trustees could, pending a suit to contest such election, declare it a nullity and order a new election for a proper purpose and upon a proper petition.—Stephens v. Dodds, 243 S. W. 710, Tex. Civ. App.

Taxpayers, dissatisfied with the decision on appeal of the county school trustees as to the acquisition of a new school site and the erection of a building thereon by the local board, must continue the appeal to the state superintendent and thence to the State Board of Education, pursuant to the Texas acts of the 29th legislature, (1905) c. 124, and the acts of the 34th legislature (1915) c. 36 (Vernon's annotated civil statutes of 1918, supp., art. 2749a et seq.) before the district court would have jurisdiction 243 S. W. 691, Tex. Civ. App.

Teachers.

The state superintendent of public instruction, who by the Kansas general statutes of 1915, § 8871, as amended by the Kansas laws of 1919, c. 256, § 1, is made chairman of the state board of education, does not have the power to refuse state certificates to institute conductor and instructors, or to reject applications for such certificates or for the renewal thereof, and does not have power to make rules and regulations concerning the issuance of such certificates in view of the Kansas general statutes of 1915, § 8872, 8993, 8999, 9002, 9023, 9039.—State v. Wooster, 208 P. 656, Kansas.

Pupils.

Where a parent was prosecuted for failure to cause his 8-year-old child to attend the public school, and it was established that the child had been taught by competent private instructors and was proficient in practically all the branches taught in the public school to children of about the same age, such parent was not subject to the penalties prescribed by the Oklahoma revised laws of 1910, § 7930, as amended

(Conclude on Page 77)

Unprotected School Grounds

MORE DANGEROUS than Railroad Crossings



For Safety Inclose the Grounds with Cyclone Fence

Many a mother has her daily worries because Jimmie or Betty must cross railroad crossings on the way to school. Yet most railroad crossings are far safer than open streets, adjoining school playgrounds.

Warnings to children and utmost care on the part of motorists have proved insufficient. In the noise and excitement of play, dangers are forgotten, approaching automobiles unseen. Every day accidents occur that could be avoided.

Cyclone Fence makes schoolgrounds safe; keeps children out of the street, protects them while they are engrossed in play.

Cyclone Fence also beautifies school grounds. Promotes orderliness, too. Built strong to withstand the hard usage which school fence gets.

Plan now to enclose your school with Cyclone Fence. We will gladly submit estimate on your requirements. Consult our nearest district office. Write for catalog S.B.J. 12.



CYCLONE FENCE COMPANY

GENERAL OFFICES: WAUKEGAN, ILLINOIS

Factories: Waukegan, Ill., Cleveland, Ohio,
Newark, N. J., Fort Worth, Texas.

DISTRICT OFFICES: Eastern Division, New York City;
Mid-Western Division, Waukegan, Cleveland, Detroit.

WESTERN DISTRIBUTORS: Standard Fence Co., Oakland,
San Francisco, Los Angeles.
Northwest Fence and Wire Works, Portland, Oregon.



CYCLONE FENCE

PROPERTY PROTECTION PAYS



Unloading "Public Service" Towels for the Treasury Bldg., Washington, D. C.

The richest place in the world saves money

The U. S. Treasury is economizing, even to washroom equipment, by using "Public Service" Towels and "No-Waste" Toilet Tissue. You can effect similar economies in all your schools.

"Public Service" Towels save money because they are strong enough and absorbent enough to be used like linen—"rub, don't blot;" fewer go a longer way. Suitable fixtures are furnished at cost; state choice of white or green enamel.

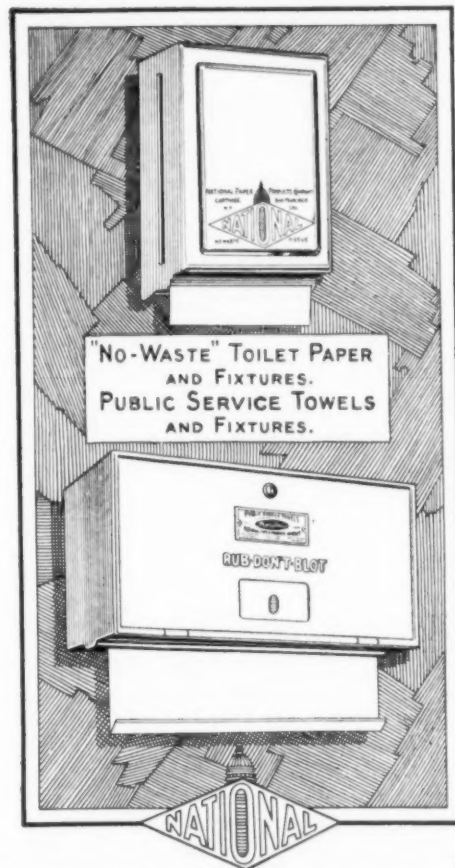
For economizing on Toilet Tissue, install National "No-Waste" Fixtures, which dispense one double sheet at a time and are guaranteed never to get out of order because they have no mechanism. We furnish them *free* for large buildings on condition that "No-Waste" Tissue be used so long as we continue to furnish first-quality paper at fair competitive prices. State choice of white, green or nickel.

Write for Samples

National Paper Products Co.

28 Furnace St., Carthage, N. Y.

WORLD'S LARGEST TOWEL MANUFACTURERS. TOILET TISSUE, TOWELS, ETC., SOLD BY ONE WHOLESALE PAPER HOUSE IN EVERY IMPORTANT CITY. LOCAL ADDRESS ON REQUEST.



"No-Waste Toilet Tissue"



Towels



FREE TEXT BOOKS

Perform their Duty

Easier - Cheaper - Better

If they are Reinforced and Protected
by a Strong, Durable, Wearable

HOLDEN BOOK COVER

made of the famous Holden Unfinished Leatherette
Material

Samples Free

THE HOLDEN PATENT BOOK COVER COMPANY

MILES C. HOLDEN, President

SPRINGFIELD, MASSACHUSETTS

(Conclude from Page 74)

by the Oklahoma session laws of 1919, c. 59, § 1.—Wright v. State, 209 P. 179, Okla.

In a prosecution of a parent for violation of the compulsory school law, an instruction as to the duty of a parent who elects to educate his child by private instruction, defining the course of study and time devoted thereto according to public school training, and requiring as the standard for teachers in such case qualifications of teachers in public schools, was erroneous, as the statute does not fix the qualifications of teachers or prescribe the course of study in private schools.—Wright v. State, 209 P. 179, Okla.

Whether independent facilities for education outside the public schools are supplied a child in good faith, and whether they are equivalent to those afforded by the state is a question of fact for the jury, in a prosecution of a parent under the compulsory school law.—Wright v. State, 209 P. 179, Okla.

SCHOOL LAW NOTES.

The Supreme Court Upholds Vaccination.

The Supreme Court of the United States has rendered an opinion in which an ordinance compelling vaccination is upheld. Justice Brandeis on November 13, 1922 rendered the following opinion in the case of Zucht vs. King et al:

Ordinances of the City of San Antonio, Tex., provide that no child or other person shall attend a public school or other place of education without having first presented a certificate of vaccination. Purporting to act under these ordinances, public officials excluded Rosalyn Zucht from a public school because she did not have the required certificate and refused to submit to vaccination. They also caused her to be excluded from a private school. Thereupon Rosalyn brought this suit against the officials in a court of the State. The bill charges that there was then no occasion for requiring vaccination; that the ordinances deprive plaintiff of her liberty without due process of law by, in effect, making vaccination compulsory; and, also, that they are void because they leave to the board of health discretion to determine when and under what circumstances the requirement shall be enforced without providing any rule by which

that board is to be guided in its action and without providing any safeguards against partiality and oppression. The prayers were for an injunction against enforcing the ordinances, for a writ of mandamus to compel her admission to the public school, and for damages. A general demurrer to the bill of complaint was sustained by the trial court; and, plaintiff having declined to amend, the bill was dismissed. This judgment was affirmed by the court of civil appeals for the fourth supreme judicial district, 225 S. W. 267; a motion for rehearing was overruled, and an application for a writ of error to the Supreme Court of Texas was denied by that court. A petition for a writ of certiorari filed in this court was dismissed for failure to comply with rule 37, 257 U. S. 650. The case is now here on writ of error granted by the chief justice of the court of civil appeals. It is assigned as error that the ordinances violate the due process and equal protection clauses of the fourteenth amendment, and that as administered they denied to plaintiff equal protection of the laws.

The validity of the ordinances under the Federal Constitution was drawn in question by objections properly taken below. A city ordinance is a law of the State within the meaning of section 237 of the Judicial Code as amended, which provides a review by writ of error where the validity of a law is sustained by the highest court of the State in which a decision in the suit could be had. Atlantic Coast Line v. Goldsboro, 232 U. S. 548, 555. But although the validity of a law was formally drawn in question, it is our duty to decline jurisdiction whenever it appears that the constitutional question presented is not, and was not at the time of granting the writ, substantial in character. Sugarman v. United States, 249 U. S. 182, 184. Long before this suit was instituted, Jacobson v. Massachusetts, 197 U. S. 11, had settled that it is within the police power of a State to provide for compulsory vaccination. That case and others had also settled that a State may, consistently with the Federal Constitution, delegate to a municipality authority to determine under what conditions health regulations shall become operative. Laurel Hill Cemetery v. San Francisco, 216 U. S. 358. And still others had settled

that the municipality may vest in its officials broad discretion in matters affecting the application and enforcement of a health law. Lieberman v. Van de Carr, 199 U. S. 552. A long line of decisions by this court had also settled that in the exercise of the police power, reasonable classification may be freely applied and that regulation is not violative of the equal protection clause merely because it is not all embracing. Adams v. Milwaukee, 228 U. S. 572; Miller v. Wilson, 236 U. S. 373, 384. In view of these decisions we find in the record no question as to the validity of the ordinance sufficiently substantial to support the writ of error. Unlike Yick Wo v. Hopkins, 118 U. S. 356, these ordinances confer not arbitrary power, but only that broad discretion required for the protection of the public health.

The bill contains also averments to the effect that in administering the ordinance the officials have discriminated against the plaintiff in such a way as to deny to her equal protection of the laws. These averments do present a substantial constitutional question. Neal v. Delaware, 103 U. S. 370. But the question is not of that character which entitles a litigant to a review by this court on writ of error. The question does not go to the validity of the ordinance; nor does it go to the validity of the authority of the officials. Compare United States v. Taft, 203 U. S. 461; Champion Lumber Co. v. Fisher, 227 U. S. 445; Yazoo & Mississippi Valley R. R. Co. v. Clarksdale, 257 U. S. 10, 16. This charge is of an unconstitutional exercise of authority under an ordinance which is valid. Compare Stadlerman v. Miner, 246 U. S. 544. Unless a case is otherwise properly here on writ of error, questions of that character can be reviewed by this court only on petition for a writ of certiorari. Writ of error dismissed.

—The county unit plan of school government which has been recommended in Indiana as the result of a survey will be opposed at the session of the legislature by the state association of township trustees.

—The Illinois education commission has proposed the county unit plan of school government and will center its efforts in that direction before the state legislature.

LB



Library of Coventry Grade School,
Cleveland, Ohio. Complete
standard equipment fur-
nished and installed by
Library Bureau

Standard L.B. school library equipment in quartered oak

Card catalog cases
Charging desks
Reading tables and
chairs
Unit wood book-shelv-
ing, wall and double-
faced
Periodical racks
Dictionary stands
Atlas cases
Display cases for books
Glass door book-cases
Vertical units for pam-
phlets, clippings and
picture files
Book trucks
Exhibition cases
Bulletin Boards
Lantern slide cases

School library supplies

Administrative school rec-
ords and files for superin-
tendents, principals, depart-
ment heads, secretaries, etc.

Write for catalogs and
information

To the N. E. A. Convention Delegates

Make it a point to visit the L. B. booth at the N. E. A. Convention in Cleveland. You will find many valuable ideas and practical suggestions to help you in your work.

It will pay you to inspect L. B. equip-
ment for school libraries.

Ask for full information regarding the
new L.B. practice method of teaching filing.

Our representatives at the Convention are at your service. They will gladly answer all your questions and outline to you just how L. B. Service and products are being used, in hundreds of schools the country over.

If you do not attend the convention, write for these two booklets

"School Libraries" No. 814

"A new Method of teaching filing" No. 625

Library furniture
and supplies

Library Bureau

Steel bookstack
Museum cases

Boston
89 Federal St.

Chicago
6 North Michigan Ave.

New York
316 Broadway

Detroit
Jefferson Ave. at Brush St.

Salesrooms in leading cities in the United States, Great Britain and France

MONTANA HAS SCHOOL TROUBLES.

The top line place which the state of Montana received in the Ayers report a few years ago is seriously threatened by the financial conditions which beset the schools of that state. The state board of education recently gave utterance to the following:

"Montana is falling far short of offering an opportunity for even an elementary education to large numbers of her rural children. More than 10,000 were offered terms of only six months or less last year. Schools are already closing in some counties where all the available funds have been spent upon a three months' term. City schools are facing enormous deficits. High school men report that due to decreased revenues they can no longer finance their schools upon even greatly reduced budgets.

"The presidents of the several branches of the university of Montana reported at our last meeting the great shortage of funds required for financing their institutions. Our system of supporting public education, we must confess, has broken down. Nothing but a decided change in our means of support can provide the funds required to keep our greatest public enterprise from falling into complete disrepute. Its limitations are now most apparent to the public generally.

"We must adopt a program of education which a democratic society should foster. To this end we recommend the removal of the serious inequalities in educational opportunities as well as in tax burden. This can be accomplished only through the provision of new revenues from the state which will make possible the lowering of special district levies; this will also include such legislation as will permit the application of better business principles in school management.

"As a nation we are committed to the principle that an elementary education is the right of every child; that a high school education should not be denied the boy or girl who desires it, and that a university course should be available to all who can qualify for that work."

ABANDON THREE SEMESTER SCHOOL.

The Minneapolis, Minn., board of education has abandoned the three semester school plan as being "impractical and undesirable." W. F. Webster, superintendent, gives the following reasons for a return to the two semester plan:

Flexibility, the great advantage argued for the three term plan, may be obtained just as well under the two semester plan.

The three term plan results in too many groups in a room, thereby making it impossible for the natural groups of bright and slow children to exist.

Three reorganizations a year, necessitated by the three year term plan, take time and destroy the continuity of connection established between teacher and child too frequently.

The clerical work is increased by the three term plan.

NORMAL SCHOOL BEGINNINGS.

The growth of the normal school idea is indicated by the following list showing the dates when legislation was enacted authorizing the establishment of normal schools in the various states.

Massachusetts ... 1838	Indiana ... 1865
New York ... 1844	Wisconsin ... 1865
Connecticut ... 1849	Vermont ... 1866
Michigan ... 1849	Delaware ... 1866
Rhode Island ... 1852	Nebraska ... 1867
Iowa ... 1855	West Virginia ... 1867
New Jersey ... 1855	Utah ... 1869
Illinois ... 1857	Missouri ... 1870
Minnesota ... 1858	New Hampshire ... 1870
Pennsylvania ... 1859	Arkansas ... 1872
California ... 1862	North Carolina ... 1876
Kansas ... 1863	Texas ... 1879
Maine ... 1863	North Dakota ... 1881

HIGH SCHOOL GROWTH IN WASHINGTON.

A steady growth in the high schools of the state of Washington has been reported to Mrs. Josephine Corliss Preston, State Superintendent of Public Schools, by State High School Inspector Edwin Twitmyer. During the school year 1921-22 the number of high schools enrolling six or more pupils was 389, as compared with 358 for the preceding school year. A total of 496 schools of the state enrolled one or more high school students in 1921-22. The total number of teachers was 2,093 and the total number of students was 54,588, of whom 6,881 were graduated.

The high schools of the state have apparently recovered from the reverses caused by the war. All high school statistics show steady growth since the first year of statehood. In 1917-18 the enrollment dropped from 37,451 to 36,985,

and the number of graduates from 4,759 to 2,660. In 1918-1919 the number increased to 4,025, and in 1919-20 to 5,222, and in 1920-21 to 6,081.

The following table shows the progress of high school work in the state since statehood:

Year	No. of Schools	Teachers	Enroll- ment	Graduates
1889-90	6	16	320	
1890-91	11	36	693	48
1891-92		44	1,065	45
1892-93	14	54	987	80
1893-94	23	65	1,540	179
1894-95	29	81	1,830	209
1895-96	31	93	2,340	388
1896-97	31	93	2,561	340
1897-98	36	101	2,630	367
1898-99	36	110	3,064	265
1899-1900	47	137	4,186	382
1900-01	74	173	4,830	404
1901-02	76	213	5,633	521
1902-03	105	255	6,192	576
1903-04	132	300	7,202	652
1904-05	151	346	9,060	765
1905-06	178	411	10,919	817
1906-07	182	488	13,087	1,020
1907-08	217	619	14,715	1,317
1908-09	167	723	17,640	1,519
1909-10	307	876	19,928	2,711
1910-11	379	962	22,042	2,077
1911-12	410	1,128	24,534	2,512
1912-13	453	1,226	27,494	2,675
1913-14	484	1,359	31,321	3,167
1914-15	505	1,457	32,244	3,788
1915-16	518	1,809	35,265	4,351
1916-17	418	1,959	37,451	4,750
1917-18	389	1,701	36,985	2,680
1918-19	347	1,612	37,317	4,025
1919-20	354	1,795	42,419	5,222
1920-21	358	1,997	47,804	6,031
1921-22	389	2,093	54,588	6,881

—The use of the public schools as an assembling station, or as a collecting agency for various projects, has recently been discouraged by State Supt. Francis G. Blair of Illinois. Mr. Blair points out that during war time these practices were necessary for emergency purposes, but the custom should not be continued during peace time because of the disorganizing and disturbing influences which follow.

Mr. Blair declares it is hardly possible to suggest a standard of selection or rejection. It may, however, be said that whoever or whatever comes with evidence that his plan means enlargement and enrichment of the school life of the children should find generous welcome and hospitality. Those who come with proposals which run counter to the established purposes of education should be denied assistance and co-operation.



“The four necessities of life are food, shelter, raiment and music.”

John Ruskin

John Ruskin listed music among the four absolute necessities of life. As such, the teaching of music in schools is of the utmost importance. Proper class room instruction is impossible without proper equipment for the teacher. Proper equipment includes a Monogram Piano, built especially

for schools by W. Otto Miessner. The Monogram puts new life into the music; acts as a tonic, builds up energy and interest, makes the school children accomplish more throughout the day. The Monogram is light and portable. Has a full, rich tone. Many exclusive features. Mail the coupon.



The Monogram will be exhibited at the Meeting of the Department of Superintendence at Cleveland, February 26 to March 2. See and hear the Monogram at Booth No. 62.

Monogram The “Baby Upright” Supreme

W. Otto Miessner’s Perfected Piano

The Miessner Piano Co.
118 Reed St. Milwaukee, Wis.



Miessner Piano Co.,
118 Reed St.,
Milwaukee, Wis.

Gentlemen:

Please send me the new Monogram catalog, your special price to schools, and details of your 10-day Trial Offer.

Name

School..... Position.....

Address

SBJ 2-23

A Department of Education — Yes or No?

The United States Chamber of Commerce Invites the Business Judgment of the Country.

The national business men's organization known as the Chamber of Commerce of the United States has invited its membership to give answers to the following questions:

1. Do you favor the creation of a federal department of education with a Secretary in the President's cabinet?
2. Do you favor enlarging the present federal bureau of education?
3. Do you favor the principle of a federal aid to education in the states on the basis of the states appropriating sums equal to those given by the federal government?

These questions are submitted in a referendum (No. 40) accompanied by a majority and minority report. The majority report which gives a negative answer to the above questions is signed by James J. Storrow, chairman, Frank H. Loesch, John G. Lonsdale, Henry S. Pritchett, and Henry D. Sharpe. The minority report which answers the questions in the affirmative is signed by Thomas E. Finegan and Mrs. Ira C. Wood. This position is so well known that we do not need to present it here.

The majority report, however, which opposes the creation of a federal department of education becomes more interesting. The chairman, James J. Storrow is a Boston banker, and John G. Lonsdale is a banker at St. Louis. Frank J. Loesch is a prominent Chicago lawyer while Henry D. Sharpe is a manufacturer at Providence, R. I., and a trustee of Brown University and of the Rhode Island School of Design. Dr. Henry S. Pritchett is the president of the Carnegie Foundation.

Danger in Sterling-Towner Bill.

The majority report discusses the proposal for the centralization of the educational interests of the country through the creation of a federal department of education and points out the present status of things as against the dangers to be invested. We present the following extracts from the report:—

The Sterling-Towner bill provides for the appropriation of \$100,000,000 by the federal government for the public schools and the creation of a department of education with a secretary in the cabinet. Of the sum mentioned, the bill provides that \$50,000,000 may be expended in raising salaries of teachers, though each state has authority, if it so desires, to divide the \$50,000,000 between teachers' salaries and other objects mentioned, intended "to equalize educational opportunities."

The agitation for this bill represents the growing tendency to endeavor to centralize all government activities in Washington and take away from the people the practice of the control of their own affairs. If our government is to survive it can only be by constant exercise of self-government by the people in things which vitally concern them. No activity of the government is of more vital concern to every citizen than education.

Hitherto, the management, control and support of our public school systems has rested with the local communities and the states. Federal participation in education means a revolutionary change in the conduct of our public schools; for it is the beginning of federal control. This is the inevitable consequence of appropriations of federal money for public schools. The proponents of the Sterling-Towner bill have thought to prevent the tendency to federal control by inserting a clause in the bill to the effect that the federal government shall not control the expenditure of the money which is to be turned over to the states.

This clause is a Ford brake on a Pierce-Arrow car. It won't hold. The recipients of bounties are sure to be compliant to the views of the dispenser of the funds even though his wishes are not embodied in words of command. The spirit of the law is more powerful than the

letter. The bill itself contains the beginnings of federal control, as it sets up standards to which the states must conform. It establishes a department of education with a Secretary, and it gives him the power to withhold the appropriation from states which do not maintain the standards.

The proposal for federal participation rests, first, upon the argument that the present method of support and control by states and communities has broken down. We have reviewed the educational development of the nation since the civil war and find that, far from having broken down, the progress made in the past fifty years represents an achievement unparalleled in any other country. The total expenditures for public schools increased from \$63,000,000 in 1871 to \$1,103,000,000 in 1920, or more than sixteen times, while the school population increased during the same period approximately four times. The value of public school property increased from \$130,000,000 in 1870 to \$1,900,000,000 in 1918.

The increase in attendance, the average length of the school year and in the average amount of education received by the population of the country has been remarkable, but even more notable has been the improvement in the quality of our schools, better teachers, better textbooks, better methods of instruction, better buildings and equipment. The whole spirit of public school instruction has been revolutionized within the past fifty years. Never have the states and local communities been so interested, so alive to their responsibilities, so progressive and generous in the support of their public schools as at the present time. The steady decrease in the illiteracy rate of the population bears witness to the effectiveness of our public school system.

Despite the great burden thrown upon our public schools resulting from the enfranchisement of the negro (as late as 1880, seven hundred out of every 1,000 negroes were illiterate), and despite the admission of a host of illiterate immigrants without any literacy test (approximately three and a half million illiterate immigrants, mostly adults, were admitted from 1896 to 1921), the illiteracy rate was reduced from 13.3 per cent in 1890 to 6 per cent in 1920. As a result of the increased attention which the states are giving the problem of adult illiteracy in 1917, the next census will show a reduction in illiteracy which will surpass all previous experience.

We have given careful attention to the specific charges against the present system made by those who propose federal participation. We find that the picture of the shortcomings of our educational system is in some respects exaggerated and other cases inadequately analyzed. The important question in considering the criticisms of our public school system that really have merit, such as the condition of the rural schools, inadequate compensation of school teachers, lack of preparation of teachers, is to know whether we are making substantial progress on these difficult problems under the present system.

Looking at the situation historically instead of by the "shock" method, and discounting passing war conditions, we find that although we are still far from the standard of perfection we desire to attain, enormous progress has been made, especially in the past decade. We find also that the various special educational activities for which federal aid is asked are by no means being neglected by the states but are receiving at the present time special attention in many of the states. In the case of physical education, for example, 38 states have already passed laws for health or physical education in the public schools.

The problem of the rural school is being solved in many states by the creation of consolidated schools. It is clear that our present educational system has not failed. There is no reason for scrapping it and no reason for putting the federal government into our public schools, or for appropriating today one hundred million dollars of federal money.

Antiquated Tax Systems.

The "poverty" argument is the other premise of the case for federal participation. Federal aid is needed, it is claimed, because some states

are too poor to furnish adequate schools for their children. It is true that the wealth of our states varies, but no state has made the claim that it cannot provide a good common school education for all of its school children. The relative wealth statistics of the states which have been presented to congress by the advocates of the bill as the basis of the "poverty" argument show that the least wealthy states are all southern states.

There is an abundance of evidence, however, from official state reports within these very states that the real difficulty is not poverty but that their systems of assessment and taxation are poorly administered and are of an antiquated and ineffective character. In our report we have quoted from recent reports of tax commissions in regard to conditions in Kentucky, North Carolina, South Carolina, Georgia and Mississippi. As an example we quote from the report of the special tax commission of South Carolina made in 1920:

"It would therefore seem to be a conservative estimate to place the value of all taxable intangible property in South Carolina now escaping taxation at not less than \$300,000,000, which is more than 70 per cent of the present assessed value of all property of every character in the State."

"In directing especial attention to the escape of this form of property from the tax rolls, the committee has not been inadvertent to the fact that much real estate is also escaping. The committee has reason to believe that there are thousands of acres of land outside of the towns and cities that are not upon the tax books. The U. S. Census Bureau (1912) gives the land area of South Carolina as 19,516,800 acres. The acreage returned for taxation in 1919 for all lands outside of cities and towns was 18,693,519. This leaves 823,281 acres to be accounted for as town lots.

"Even in the cities, where the listing and assessment of real estate would seem to be comparatively easy, improved lots have been known to escape taxation for years. In 1915 the tax commission of this state had surveys made of five of the city blocks in Columbia and found as to three of them that two-thirds of the land and one-half of the buildings in one block were not returned for taxation; in another block twenty-three fortieths (23/40) or over half of the land and half of the buildings were escaping taxation; in the third block, 23 front feet valued at \$460,000, and a lot and small building valued at \$600 escaped taxation."

The income and ability of a state to maintain a satisfactory school system depends only in part on the property within the area; it depends quite as much also upon the willingness of the people of the state to adopt a modern system of tax laws and assess to its real value the property within the state, collect a substantial tax on the property thus assessed and then to use a substantial proportion of the income thus derived for school purposes instead of using it for other less essential purposes.

The very states on whose behalf the "poverty" argument is apparently put forward are proceeding to modernize their taxation laws and practices, and this will result in increased appropriations for public schools without undue strain upon the public finances.

Is a Log-Rolling Bill.

We have examined in detail the basis of the distribution of federal funds in the Sterling-Towner bill and find that the framers of the bill have been guided by political considerations rather than educational necessities. It is a log-rolling bill. More than \$40,000,000 out of the \$100,000,000 appropriation would be apportioned to the following eight States; New York, Pennsylvania, Illinois, Ohio, Massachusetts, Michigan, Iowa, Texas. These states cannot be classed as states with backward educational institutions; they pay their teachers well above the average for the country. There is neither an educational nor a poverty argument for federal aid for these states.

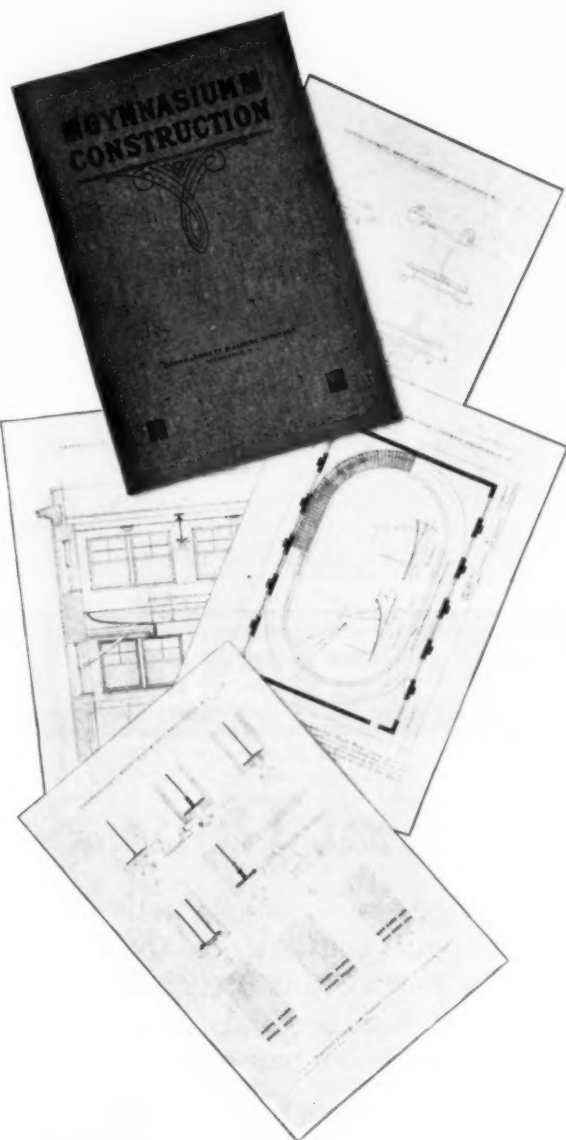
The second question referred to the committee is the coordination of the educational activities of the government, that is to say, Do we need a federal department of education with a secretary in the cabinet, as proposed in the Sterling-Towner bill? The present bureau of education, established in 1864, although handicapped by the meagre appropriations, has played a useful part in the development of our public educational system in the past fifty

(Concluded on Page 83)

NARRAGANSETT

STANDARD EQUIPMENT

GYMNASIUM ÷ PLAYGROUND ÷ STEEL LOCKERS



80 Pages
Classified
Indexed

Why Build Mistakes?

*The best Equipment
Can't correct
Wrong Construction*

This Manual is Free to
Architects
School Officials
Physical Directors

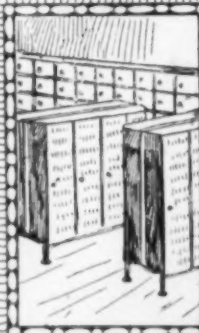
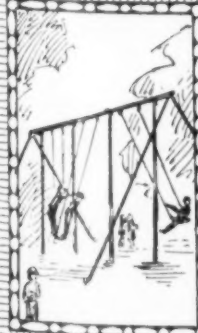


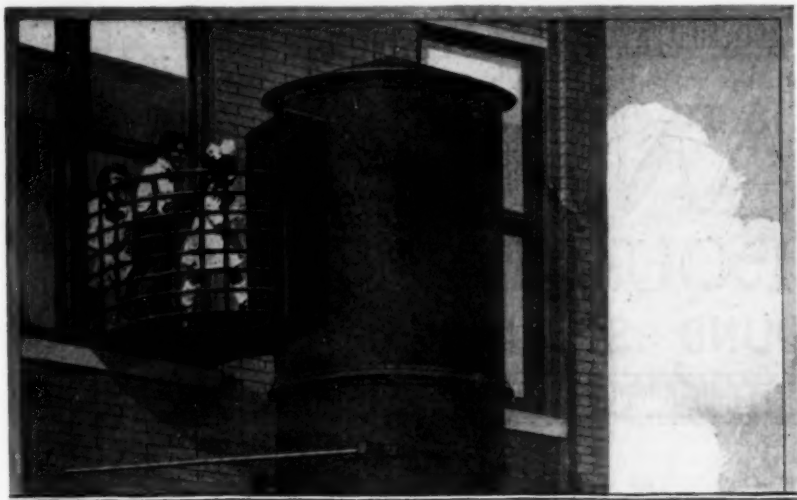
NARRAGANSETT MACHINE CO.

CHICAGO
1504 Monadnock Block

PROVIDENCE, R.I.
Established 1882.

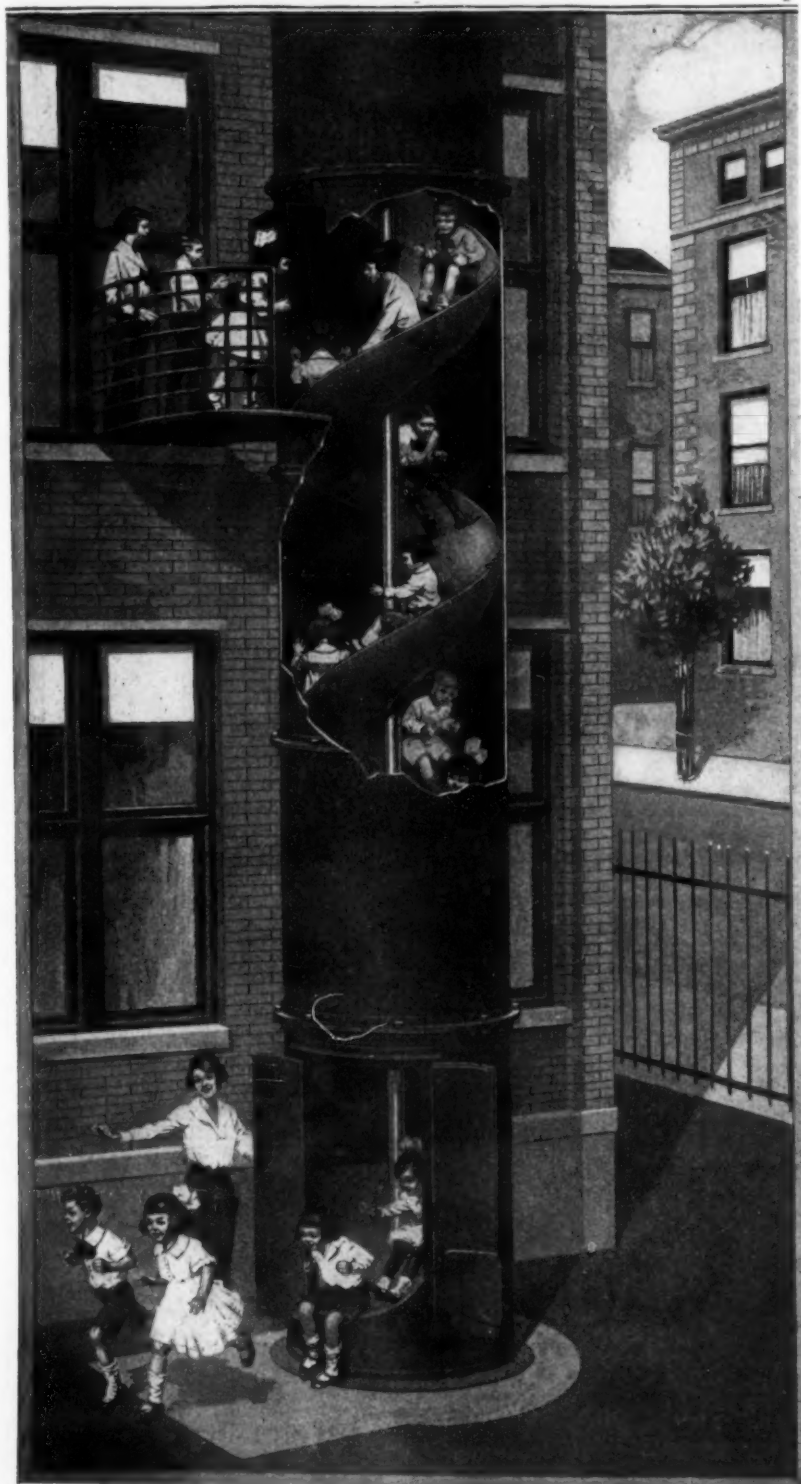
NEW YORK
52 Vanderbilt Ave.





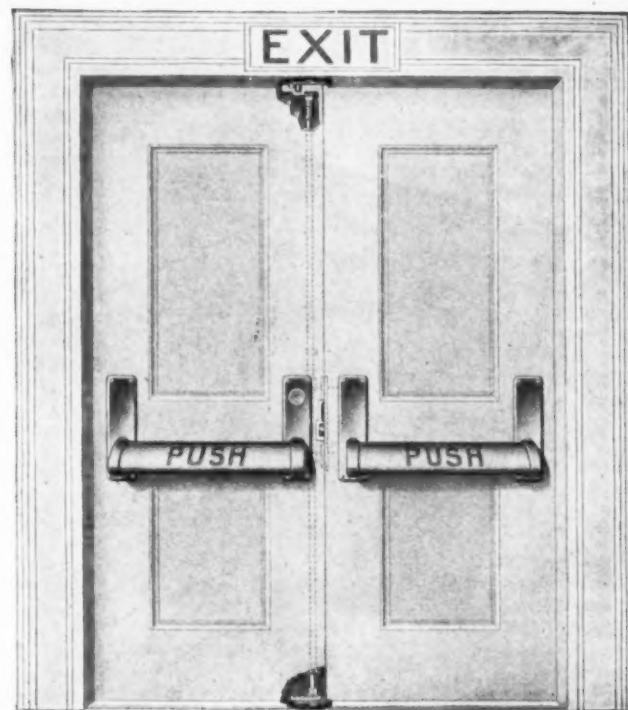
This Dow Spiral Slide Fire Escape will save 200 children a minute. Ask for details.

THE DOW CO., Incorporated 300 N. Buchanan St.
Louisville : : Kentucky



Quick exit assured Safety provided

Members of school boards and other officials on whom the responsibility rests should make full provision for protection to life in case of panic by the use of this safety device.



SARGENT

Reg. U. S. Pat. Off.

Fire Exit Door Bolts

as illustrated above, are attractive in appearance, strong in construction and quick in action. The construction is such that in operating the push bar the hands or arms cannot be caught between the bar and the door.

They have a wide push bar which projects only 2½ inches from the surface of the door, permitting the door to swing wide open so as not to obstruct passage through the doorway. Slight pressure on the bar at any point will release the bolts instantly. All edges and corners on the bars and brackets are carefully rounded, eliminating all possibility of wearing apparel becoming accidentally caught.

Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

SARGENT & COMPANY, Manufacturers
New Haven, Conn.

New York

Chicago

years.
educat
does
tance
Plac
net w
tion
count
prized
there
cabine
alogy,
Unite
Europ
ized a
the co
p
The
Educa
Leade
ality,
of ent
head
select
a poli
partm
result
The
the c
ment
activi
provid
gover
as co
istere
It i
tional
be tra
they
partm
with
ments
they
der th
that
and
ferre
istere

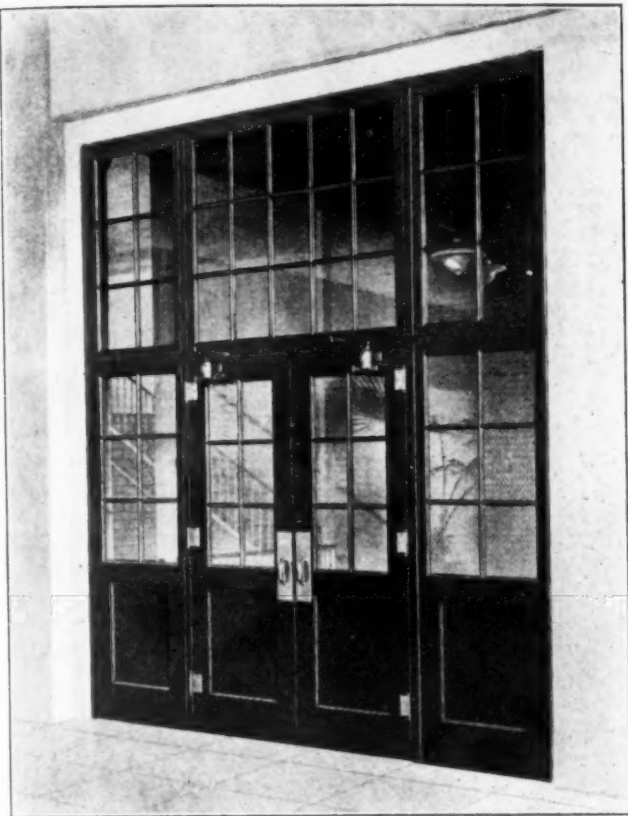


Illustration of Dahlstrom Smoke Screen,
Rhode Island School of Design,
Providence, Rhode Island.



SMOKE SCREENS

To prevent the rapid spread of smoke and fire in a school, Smoke Screens should be used to react against drafts.

Dahlstrom Smoke Screens not only prevent this spread of smoke and fire but add another fire retardant to the buildings. Years of experience in the manufacture of hollow metal doors and trim assures you of the best possible product.

DAHLSTROM METALLIC DOOR COMPANY

489 Buffalo Street, Jamestown, New York

NEW YORK
25 Broadway

CHICAGO
19 So. LaSalle Street

DETROIT
1331 Dime Bank Bldg.

Local representatives in all principal cities.

(Concluded from Page 80)

years. It is argued, however, that having the educational interests in charge of a bureau does not give due recognition to their importance in the life of the nation.

Placing a secretary of education in the cabinet would not necessarily add to the appreciation of the importance of education. In no country in the world is education more highly prized than in the United States. Although there has been an educational officer in the cabinets of European nations, there is no analogy, because the federal character of the United States government is not known in European nations, which are highly centralized and in which education is administered by the central government.

Political Not Educational Consideration.

There is no evidence that a Secretary of Education would furnish national leadership. Leadership depends upon the man, his personality, the creation of ideals, the development of enthusiasm. With a seat in the cabinet the head of the department of education will be selected on the basis of party politics, and if a politician is selected for the head of the department what kind of national leadership will result?

The Sterling-Towner bill does not provide for the consolidation under the proposed department of education of any of the educational activities of the government. The bill simply provides that such other branches of the government shall be added to the department as congress may determine should be administered by the department of education.

It is not likely that many of the other educational activities of the government will ever be transferred from the departments in which they are now located to the proposed new department for they are too closely connected with the administrative work of those departments or of so highly specialized character that they can be more efficiently administered under their present departments. It is not likely that the educational activities of West Point and Annapolis academies will ever be transferred or that the Indian schools will be administered by a department of education, neither

is it likely that the agricultural experiment stations and the other agricultural educational institutions now conducted by the department of agriculture will be taken from that department.

The bill does not even propose that the board of vocational education shall be administered under the new department. The new bill is entirely futile in accomplishing anything in the way of coordination of the educational activities of the government.

It is doubtful whether it is wise to add to the size of the cabinet. A proposal has been made by the President for the creation of a new department to be known as the department of public welfare. Further discussion of the organization of this department has been postponed awaiting the report of the commission on the reorganization of government activities. If it is considered necessary to add another member to the Cabinet it would seem preferable that it should be a department of public welfare along the lines recommended by the President. This department as proposed would include a division or bureau of education.

Pending further consideration of the status of the bureau of education under any reorganization of government activities, we believe that there should be substantial increase in the appropriation for the present bureau of education in order that educational research may be conducted on a larger scale, and more especially with a view to stimulating educational activity in the more backward states. We believe, however, that the appropriation of the bureau should be increased gradually, and that it should be based upon definite proposals for the expenditure of the increased funds.

BONUS FOR PROFESSIONAL IMPROVEMENT.

In appreciation of the honest and earnest professional spirit of teachers who devote themselves to their work and professional improvement, and to encourage others to do so, the school board of Hammond, Indiana, has approved a plan for promoting professional study and travel and has passed it as an order in their proceedings.

To promote professional improvement of all teachers, principals and supervisors elected to

positions in the city schools, a bonus of \$50 is provided in the annual salary of each teacher, principal or supervisor provided the summer has been spent according to the following plan:

First summer—Normal school, college, university or approved special school attendance, receiving a maximum of five semester hours' credit. If fewer than five semester hours are credited, only \$10 will be granted. In counting summer attendance credits for correspondence or extension work done during the school year are included.

Second Summer—Same as first summer, or travel of educational value, covering at least six weeks. Statement of travel, places visited, time included must be submitted to the board for approval before the bonus is granted.

Third summer—Rest, or travel of educational value.

Fourth, fifth, and sixth summers.—Repeat the foregoing plan of summer school attendance, travel and rest.

The plan is to begin with teachers who attended school during the summer of 1921; the first bonus for travel to be for the summer of 1922; the first bonus for rest to be the summer of 1923, if taken in the order prescribed.

Under the plan, the bonus is included in the last pay check in June of each school year. It may be paid to teachers at the close of their first year of work, provided extension work during that year has been credited. Summer work previous to the beginning of the current school year is not credited. Travel during vacation months is credited to the teacher if such travel has been approved, but no credit will be given for travel during the school year. Travel or rest following extension or correspondence courses may not be credited to the teacher. The plan will apply in 1923 to teachers who can qualify for

- Summer work in 1921.
- Extension or correspondence work during school year 1921-22.
- Summer work in 1922.
- Extension or correspondence work during the school year 1922-23.
- Travel 1922, provided it followed study in 1921.

*I'd like a real Playground
next Summer!*



Fill the need which exists
in your city -

Plan NOW to equip with

**EVERWEAR
ALL STEEL
PLAYGROUND
APPARATUS**

Each EVERWEAR fitting has 10 sq. in. of positive clamping surface, *for each pipe*; this means much to you. "Play Apparatus is but as strong and safe as its fittings".

Our Planning Department Is at Your Service
Our 52 Page Catalog Will Prove Enlightening

The Everwear Manufacturing Company

SPRINGFIELD, OHIO, U. S. A.

Please refer your inquiry to Department "A"

Buffalo Stimulates Professional Spirit.

The teaching forces of Buffalo, N. Y., are demonstrating a remarkable professional spirit in that they have given much time in pursuing studies outside of school hours. The local normal school has enrolled 1000 Buffalo teachers for extension work, the University of Buffalo 319 and Canisius College 124.

They completed for credit 16,815 semester hours during the past year. In addition to this 130 teachers secured college degrees during the period named. The teachers have also attended what is an equivalent of 8,585 semester hours for which they have received no credit. The grand total of 33,200 semester hours or the equivalent of 1106 solid years of college work has been obtained.

In commenting upon the achievement, the department of instruction says: "If 1106 years of college work had been done by our teachers on leave of absence without pay, it would represent an expenditure of more than two million dollars. It actually has cost the teachers almost nothing in money, most of the courses having been offered to them without charge."

In inaugurating this somewhat remarkable work on the part of the teaching force, Superintendent E. C. Hartwell says: "The purpose is to make the individual classroom teacher the center of gravity in the educational service. He has assumed that teachers are desirous of raising their standards of educational accomplishment, and that this can only be done as each teacher voluntarily and cheerfully sets about the task of increasing her individual capacities and abilities."

**SALT LAKE CITY'S NEW TEACHER
TRAINING PLAN.**

"The most effective means of developing practical teaching ability on the part of young people who are just out of normal schools is an urgent problem confronting most school systems. In spite of the most excellent training and professional study given by the normal schools to these prospective teachers there remains much uncertainty about their real ability to teach school until it has been demonstrated

in actual classroom teaching and management," recently said S. M. Child, Superintendent of the Salt Lake City, Utah, Schools.

"To meet this situation it has been the practice in Salt Lake City for several years to place young people who are without teaching experience, but who possess the necessary minimum scholarship and professional requirements, with experienced teachers, as their assistants, for at least a year. The practice has been made economically possible by placing first and second grade children on a half day basis, requiring each head teacher, with her assistant, to teach two groups during the day. It often happens that as many as 75 or 80 children are thus provided for daily in one room with such adjoining accommodations as will permit the teaching of small groups that are taken out of the regular classroom.

"At the beginning of this year a new feature of teacher apprenticeship is being tried out. About sixty young people who contemplate graduating from the normal school this year have been employed by the board of education on part time as assistant teachers. They will continue their work in the school of education part of each day, dividing the daily hours between study and teaching service as the service requires.

"In order that the head teacher may not be without an assistant during any part of the day the program is so arranged that the assistants operate in pairs, one assisting in the morning, the other in the afternoon. The normal school as well as the city school system will observe and check the work of the assistant in service and credit the training toward normal graduation. In no case does an assistant take charge of a class room as a regular teacher.

"It is too early to speak of results under this new plan. It has a few drawbacks that are fully recognized. The large purposes and possibilities of the plan, however, appeal to us. Briefly, it provides for a very practical kind of training to be carried on in connection with daily study. It is believed that the plan will result in better teaching ability on the part of normal graduates and increased scholarship of a usable kind. It will be admitted by all that

these are results devoutly to be hoped for since the scholarship and pedagogy that are really needed are those which bear fruit in teaching service."

EDUCATIONAL ASSOCIATION ACTIVITIES.

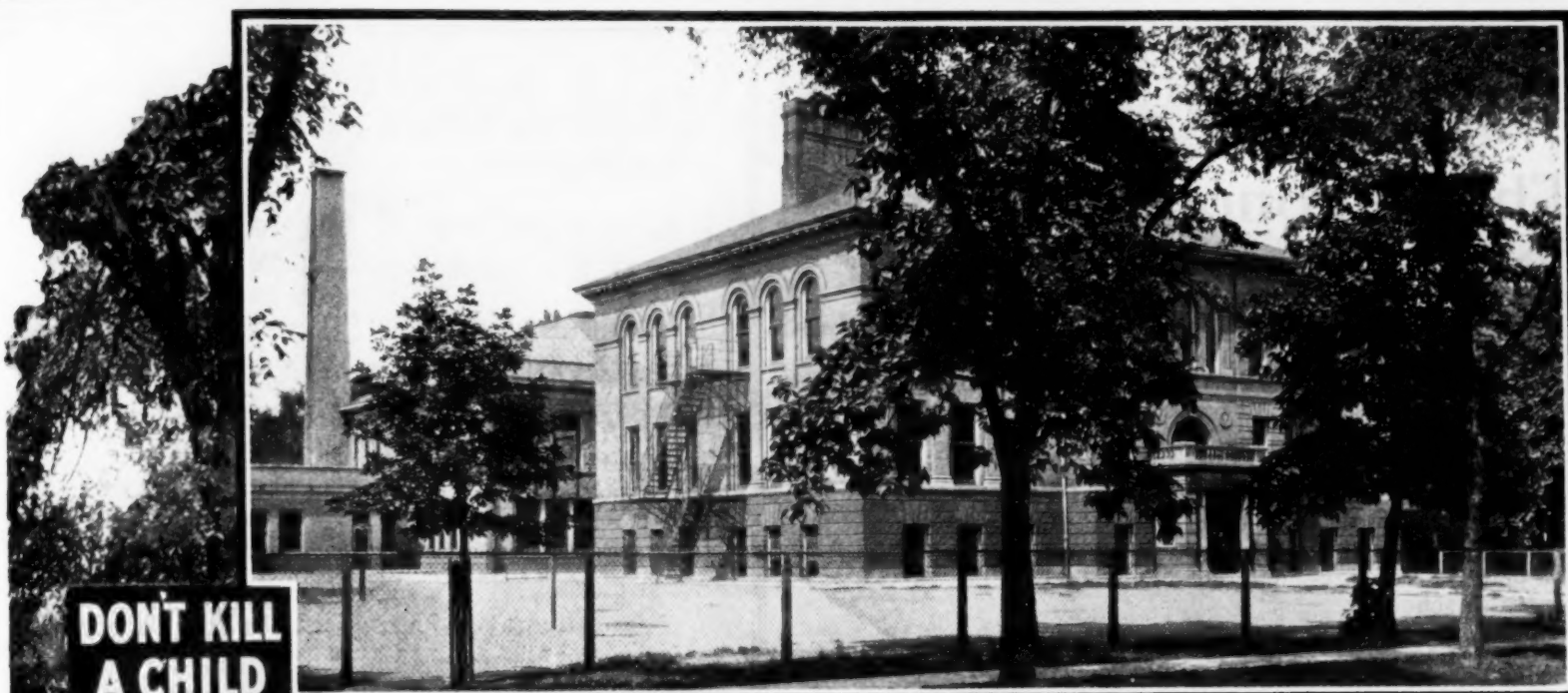
—Frank B. Wade of the Shortridge high school, Indianapolis, Ind., has been elected president of the Central Association of teachers of Science and Mathematics.

—J. W. Searson of Lincoln, Nebraska, was elected president of the National Council of English; first vice-president, O. B. Sperlin, Washington; second vice-president, Alonzo C. Hill, North Carolina College for Women; secretary-treasurer, W. W. Hatfield, Chicago.

W. W. Lewton, recently appointed chairman of the Illinois Educational Commission to fill the vacancy made by the resignation of A. M. Shelton, now Director of Education and Registration. Mr. Lewton has been Superintendent of Schools at Cicero, Illinois, a suburb of Chicago, for fifteen years. During this period Cicero has increased in population from fifteen to fifty thousand. Superintendent Lewton has been, for a number of years, one of the aggressive leaders of the Legislative Committee of the Illinois State Teachers' Association, which has been a recognized factor in procuring constructive and remedial school legislation.

—Bruce Painter, superintendent of the Petaluma, Calif., schools was elected president of the California Teachers' Association, Bay section, which has a membership of 8,000 teachers. The vice-president is Mary F. Mooney of San Francisco; secretary-treasurer, E. G. Gridley, Oakland.

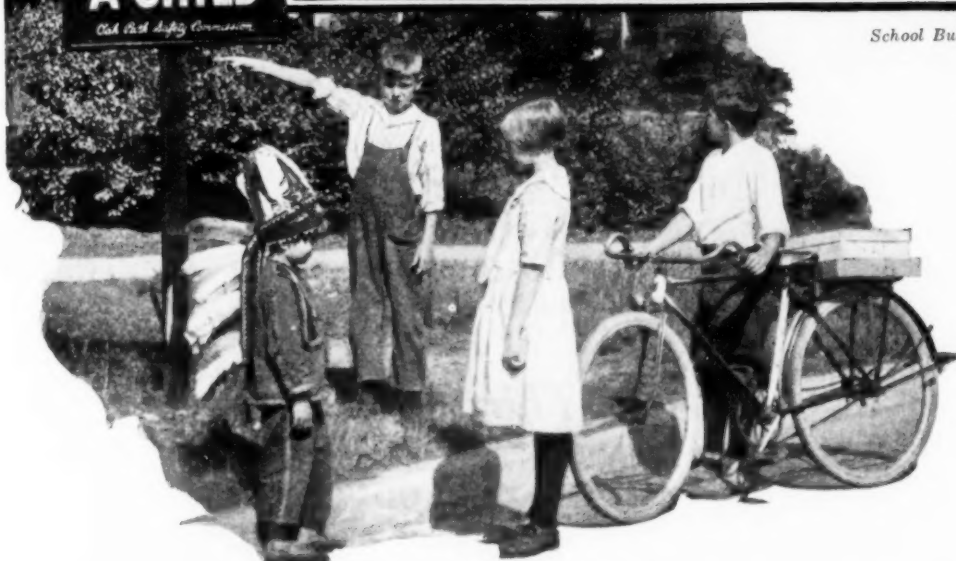
—The National Association of School Business Officials will hold its annual convention at St. Louis, Mo., May 15, 16 and 17, 1923. The St. Louis School Officials will be hostesses of the convention. Information about the meeting may be had from Mr. R. S. Scobell, secretary of the Erie, Pa., board of education or from Mr. Charles P. Mason, secretary of the board of education, St. Louis, Mo.



School Building at Washington Blvd. and Kenilworth Ave., Oak Park, Illinois.

**DON'T KILL
A CHILD**

Oak Park Safety Commission



"Don't Kill a Child"

—is the warning to motorists by
the Oak Park Safety Commission

and as part of this campaign to protect Oak Park school children they have standardized on PAGE PROTECTION FENCE to protect the children in their own school building against passing traffic.

The growing frequency of accidents to school children demands *positive* protection in the school yard. PAGE PROTECTION FENCE combines attractiveness with unquestioned assurance of safety. It beautifies the grounds, compels respect for the privacy of the property, perpetuates the work of the architect.

There is an expert fence-erecting organization in each of the cities listed below, that carries complete stocks of Page Fence Products and is equipped to give you prompt and efficient service in construction.

ASHVILLE	BALTIMORE	BINGHAMTON	BIRMINGHAM	BOSTON	CHARLOTTE
CHICAGO	CINCINNATI	DALLAS	DETROIT	KANSAS CITY	LAFAYETTE
MEMPHIS	MINNEAPOLIS	NEW HAVEN	NEW ORLEANS	NEW YORK	OSCEOLA
PHILADELPHIA	RENSSALAER	SPRINGFIELD, MASS.	ST. LOUIS	TULSA	

Address all inquiries to

PAGE FENCE & WIRE PRODUCTS ASSOCIATION

215 North Michigan Avenue

CHICAGO



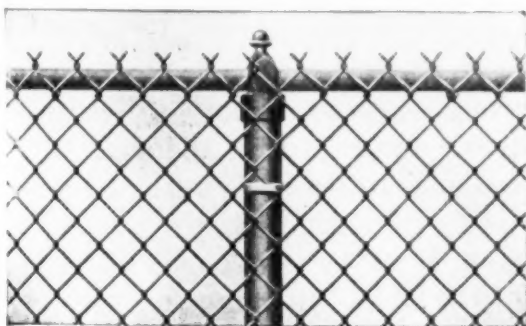
*"America's
first wire
fence—1885"*

PAGE

PROTECTION FENCE



*The only wire
fence made of
Armco Ingot Iron*



DESIGN DETAILS OF PAGE PROTECTION FENCE

The strongest type of protection fence made. Furnished in either steel or Armco Ingot Iron in Heights of 36", 42", 48", 60" or greater. Fabric is 2" or 1½" mesh, No. 9, or 2" mesh, No. 6 wire, heavily galvanized. Each picket is interlocking, preventing any spreading of the wires. Fence is non-climbable and barbs at top of fabric give still further protection. Furnished with either a top rail, as in illustration, or with heavy lateral wire. Line posts are tubular construction—1.9" outside diameter, spaced 8 ft. apart, of sufficient length to set 2½ ft. below grade line. End, corner and gate posts are 2½" outside diameter, set 3 ft. below grade line. Posts may also be had of concrete, as in Oak Park school fence illustrated above.

OAK FLOORS

FOR EVERLASTING ECONOMY

Their Economics for the School Board

Floor costs should be figured per year of service—especially in school buildings. While Oak Floors may cost a little more at first, they cost less in the end, because they last. Oak Floors over a hundred years old are common in residences and Oak Floors over fifty years old in factories.

No flooring, of wood or other material, can give the long and satisfactory service of Oak. And in the absence of any price advantage it is hard to see why builders should forego the many advantages and the obvious economies of Oak Floors in schools.

By being easy to keep clean, Oak Floors effect a further saving in school expenses. A hot linseed oil finish, applied with a large brush, produces a pleasing color and permits daily scrubbing. The oil closes the wood pores, making it impervious to water. It also reduces the dust so injurious to health.

Write for Free Booklets

Three booklets, in colors, containing accurate information on all the uses of Oak Flooring, mailed free to any school board member or school official.

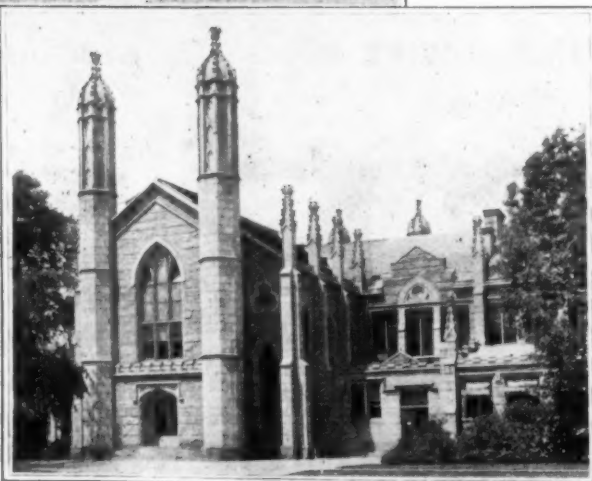
OAK FLOORING ADVERTISING BUREAU
1067 Ashland Block, Chicago

High School,
Sardis, Miss.
Oak Floors



Law Building,
State University
Lincoln, Neb.
Oak Floors

Library Building,
Harvard
University,
Cambridge,
Mass.
Oak Floors



A recent survey of the Educating Profession—

A comparison of the sales for the year just past—

And the receipt of scores of letters heartily indorsing MINTER PORTABLE SCHOOLS has proven three very interesting facts.

The First—

Prominent educators are practically as one in the indorsement of portable schools as the most efficient and economic means of relieving housing shortage until permanent buildings are available.

The Second—

More MINTER PORTABLES were used during the year just past than in any year previous by an overwhelming number.

The Third—

The MINTER PORTABLE is really a SUPERIOR PRODUCT. This fact may be accredited for the most part to the educating profession itself because, while the Minter organization has been unceasing in its work to produce the best portable school on the market, yet it has been largely through the counsel and criticism of prominent educators that the success enjoyed has been attained.

There is no condition, where temporary housing is to be employed, which MINTER PORTABLES cannot meet.

NOTE TO SUPERINTENDENTS—

There is in preparation a booklet cataloguing in detail, to be sure, the MINTER PORTABLES, but containing in addition some very helpful data gathered from years of practical experience, and from the most recent theories developed. As soon as it is completed we will be glad to send you a copy without any obligation to you if you will write for it.

THE MINTER HOMES CORPORATION

Factories:

Huntington, W. Va.

Greenville, S. C.

Wire school buildings the best way!



HAVE the wires run on the surface, encased in strong rigid Wiremold Conduit. Then when you want to re-arrange class-rooms, to move partitions, you can change the position of your lights, swiftly and economically, without the mess or fuss of tearing open walls and ceilings.

Wiremold is the *best* conduit for surface wiring, because it is sturdy, good-looking, easiest to apply, and least expensive.

For well-wired school buildings

Specify WIREMOLD CONDUIT

American Wiremold Co., Hartford, Conn.

SCHOOL FINANCE AND BUILDING

—The Lawrence, Kans., board of education has figured out that 53 per cent of the local tax goes to state and city government and 47 per cent to the city schools. The amount received by the schools is distributed as follows: instructional service, 71.05%, operation 10.39%, maintenance, 5.46%, field charges, 1.12%, debt service, 5.5%, general control, 5.69%, miscellaneous, 2.79%.

—New York, N. Y. The board of education has directed that Supt. W. L. Ettinger and the Board of Superintendents investigate school congestion and report on their findings. The investigation was ordered after Supt. Ettinger at a meeting of the board, had assailed President George J. Ryan's report on part-time conditions. The investigation is to cover the use of existing accommodations and particularly of the relief afforded by the opening of new schools since September, 1921, and includes instructions to report on:

1. The relief of congestion which each of the new buildings was intended to provide.
2. The extent to which it is providing such relief.
3. The relief of congestion which each of the other new buildings in the program is planned to provide.
4. The maximum capacity of each new building, full time and double session, and the program that has been formulated to provide for such use.
5. The extent to which each building is at present being used.

—Galveston has recently voted \$1,000,000 in bonds for school purposes. Wm. B. Ittner, architect and school specialist of St. Louis, in association with DeWitt & Lemmon, architects, Dallas, Tex., has been selected to plan and supervise the building program.

—Jacksonville, Fla., has voted \$1,000,000 for two junior high schools. Wm. B. Ittner of St. Louis has been selected as consulting architect. Greeley & Benjamin of Jacksonville are the local architects employed.

—The board of education, Bellevue, Ohio, has decided to enlarge its high school plant. The plan at present is to build a new auditorium and gymnasium combined with a number of school-rooms. It will be modern in every way and used for school and community purposes.

—The board of education at Sedalia, Mo., recently secured a successful bond election for \$500,000. The vote was nearly 9 to 1 in favor of the bonds. The money is to be used for the erection of a new high school building and for the reconstruction of a grade school building. Since its incorporation in 1866 the Sedalia schools have never failed in having the public confidence and in securing bond issues requested from the local voters.

—Chico, Calif. The city has dedicated a new \$800,000 high school. The plant which is not yet completed, is located on a site of 57 acres, and will cost when completed more than a million dollars.

—Redding, Calif. The corner stone of an elementary school was laid on December 3rd. The building will cost \$100,000.

—Willows, Calif. A fine elementary school has recently been completed. While plain in construction, the school is attractive in appearance and is economical in construction.

—Napa, Calif. A new elementary school has been named after J. L. Shearer, for almost half a century at the head of the elementary schools of the city.

—Red Bluff, Calif. The Lincoln School, in use for 35 years, has been declared unsafe. An election will be held to vote bonds for a new school to replace this building.

—Charleston, W. Va. The Library Board has completed a city-wide campaign for funds to be used in erecting an adequate and appropriate library building. The sum of \$255,000 has been raised for the purpose.

The maintenance of the library is financed by the school board. Each child in the schools was given an opportunity to contribute to the fund.

—The school board of Charleston, W. Va., has asked Supt. S. E. Weber to make a school building survey with a view to obtaining a bond issue for the erection of additional school buildings.

—Carthage, Mo. A new twelve-room grade school has been completed and opened for use this year. This building completes a program undertaken a few years ago for replacing old, insanitary buildings with modern ones. Three such buildings were constructed, making in all a group of seven modern grade buildings. The high school which is comparatively new, is a stone structure of good architectural design, and accommodates seven hundred students.

—Kearney, Neb. The city schools are growing rapidly and the board of education faces a building program in the near future. The enrollment in all the schools has reached the 2,000 mark, while the enrollment in the high school is 545, a little more than 100 in excess of last year. The solution of the housing problem appears to be the construction of a junior high school to replace an old building.

—The Los Angeles, Calif., board of education has adopted preliminary plans for the new John C. Fremont high school to cost \$600,000. The school grounds will cover thirty acres, and the school will be ready February, 1924.

—The corner stone for a million dollar high school to be erected at Quincy, Mass., was laid with appropriate ceremonies, Mayor Bradford and Chairman M. L. Brown officiating.

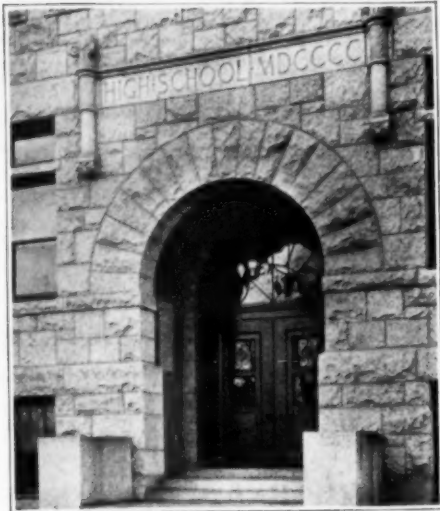
—The Chamber of Commerce of Indianapolis, Ind., has asked the board of education of that city to carry out its school building program with caution because such program will bring the municipality perilously near the bond limit.

—Speaking on the subject of school revenues, A. M. Shelton of the Illinois educational commission, recently said: "The wrong goose has been plucked. As a matter of fact the system of direct taxation should be supplemented by a system of indirect taxation."

—Owing to doubts as to the efficiency of the ventilating systems of two new school buildings at Indianapolis, Ind., the local Chamber of Commerce, as an unbiased body, is conducting a test and will report to the school board.

—The Trenton, N. J., board of education has formulated a building program. The pamphlet issued on the subject enumerates the present buildings, their age and physical condition, and then presents the need for new buildings in given localities. Under the program two new junior high schools and a grade school are already in process of construction.

Granite - The Noblest of Building Stone



Entrance door to Milford High School, Milford, Conn. Note how clean and absolutely free of cracks the granite is and how true and unworn the steps after 20 years of service.

Twenty Years Have Left No Marks On This Granite School

Twenty years of grime and soot and rain and snow, twenty years of hard use and abuse from thousands of thoughtless children, still the granite is as fresh as the day it was quarried.

In forty years it will look the same.

For granite has everlasting lastingness.

For those of you who still believe that granite is too expensive for school construction, we have an eye-opening story to tell.

Or you might prefer our booklet *Architectural Granite*. Shall we send you a copy?

National Building Granite Quarries Association, Inc.

H. H. Sherman, *Secretary*

31 State Street, Boston, Mass.

GRANITE

—The municipal and school tax at Houston, Texas, is \$2.50 on the \$100 which is insufficient to maintain the schools upon a desirable basis. A complete separation of the municipal and school government is proposed.

—In view of the recent tragedy at High Point, Ga., when 49 children were trapped in flames and two lost their lives in a two-story school-house fire, the Enquirer Sun of Columbus, Ga., recommends one-story school buildings as being safer.

—Lewiston, Me. A plan to enlarge the public school facilities of the city has been considered by Supt. C. W. Bickford and the board of education. Supt. Bickford pointed to the necessity of two additional school buildings for the next school year.

—Fort Wayne, Ind. An extended building program, including the erection of two new structures, a large addition to one building and the remodeling of another, formed the basis of a report recently submitted to the school board by Supt. L. C. Ward. The building program will be financed by an \$800,000 bond issue which is to be submitted to the voters for approval.

—New York, N. Y. The Public Education Association has recently charged that the Hylan administration alone is responsible for the serious delay in school building construction. The fundamental cause for the delay is the failure of the administration to provide funds for an adequate staff in the building department to draft the necessary plans and specifications for the buildings. A second cause is the interminable red tape, known as the "fifty steps" which require endless conferences and redrafting of plans and specifications. Another cause is the delay in completing construction after contracts have been awarded. Contractors, it is pointed out, have frequently gone two years or more beyond their contract time.

—Chicago, Ill. The public schools are short 41,000 seats which means that one out of every ten of the children is without the necessary seat. The situation was explained by President John Dill Robertson, who appeared before the city council committee on finance to answer questions in connection with the annual 1923 budget of the school system. President Robertson pointed out that the school board has a three-year building program and is doing everything possible to rush the completion of new buildings.

—Amsterdam, N. Y. The president of the school board recently submitted data on the building program which the board has adopted for the next year. In carrying out its program, the board has considered such details as seating capacity, probable increase in registration over a period of years, estimated costs of construction and maintenance of the proposed increase in school facilities.

—Houston, Tex. A reduction of \$81,560 in the 1923 budget of the schools has been announced by the business manager. It is planned to take care of the needs of the schools with a smaller budget even though there may be more children in 1923.

—Because of insufficient funds, the Connecticut State Board of Education has reduced the school aid to 36 per cent. Instead of the customary payment in full to towns for aid in paying teachers' salaries, only 36.25 per cent will be paid this year, according to a decision of the board of control.

—Oakland, Calif. The board of education has asked for a bond issue of \$9,500,000 for new schools and additions, which will be submitted to the voters in the spring.

—Chicago, Ill. The sum of \$57,259,000 will be expended next year for the education of Chicago children. The actual amount for educational purposes will be \$40,000,000 and that for new buildings will be \$15,000,000, or \$5,000,000 more than the 1922 tax levy.

—A revaluation of all property in Illinois at its fair cash value, the creation of a system of corporation taxes, and a general income tax were included in resolutions presented to the Illinois Teachers' Association at its last annual convention held in December, at Springfield, Ill.

Among the resolutions prepared by the resolutions committee under the direction of the chairman, O. L. Manchester, were the following: Strengthening the certification requirements, giving more attention to matters of health in the schools; giving the teacher a permanent tenure of her position after three years' service, demanding the same measure of freedom for normal schools as is given the state university in expending appropriations made for specific purposes; making illegal interstate traffic of inflammable films.

—The Milam County board of Texas has adopted a resolution asking the state legislature

to raise the state school apportionment from \$10 to \$14 per student. The increase, if granted, will provide longer terms and permit the purchase of additional equipment.

—Rockford, Ill. The school board has been compelled to reduce the budget by more than \$400,000 to come within the income allowed the schools under present tax laws. The building program appears to be most seriously affected by the tax limitations. This will be made up in part by a bond issue of \$1,500,000 passed two years ago.

—Greensboro, N. C. The school board has renamed three school buildings. The buildings have been designated as the David Caldwell School, the Charles McIver School, and the Joseph Price School. A new school has been given the name of Charles B. Aycock.

—Figures recently compiled in the office of the state superintendent of public instruction of Illinois show that it costs \$61.15 a year to educate one child. This is the average cost and includes both high school and grade pupils.

The cost per capita of students in high school is \$130.81 a year. This does not include interest on bonds but only current expenses.

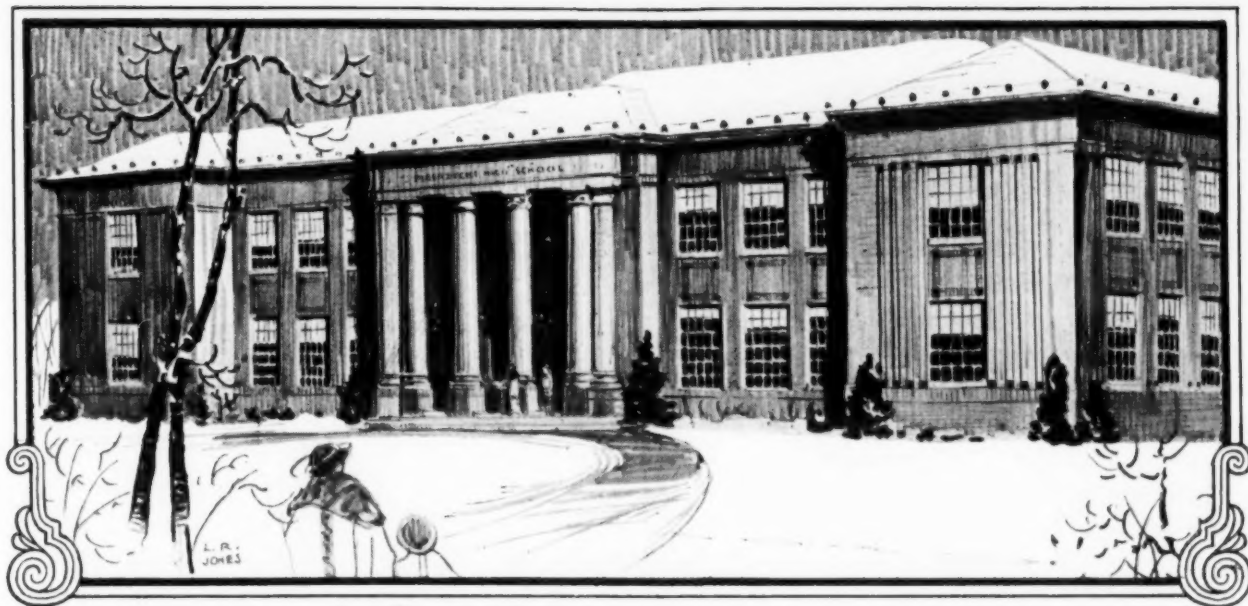
—Detroit, Mich. Plans for the erection of another large intermediate school at a cost of more than a million dollars have received a setback following a meeting of the board of education on December 18th. Opposition against a large building was based on the high initial cost of the structure, the high interest cost, depreciation, payroll expense, and high cost of heating and lighting. An agreement was entered into by which the architect is to prepare new plans for a building to house intermediate and high school students and to provide more cubage at the same cost.

—The serious effects of crowding in the schools of the congested sections of New York City, disclosed in a recent survey by the New York Tribune, have drawn the attention of numerous influential civic bodies which are concentrating forces in bringing about an early correction of the evils noted.

Under the leadership of the local women's club and the women's municipal league, these organizations have directed an attack which is aimed to discourage the withdrawal of children from the schools before they have completed

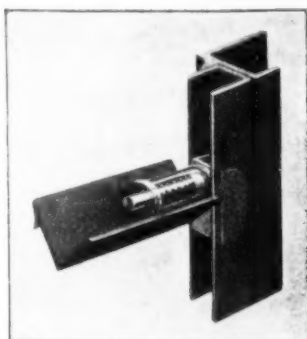
(Concluded on Page 91)

ARCHITECTURAL FENESTRA ~ ~

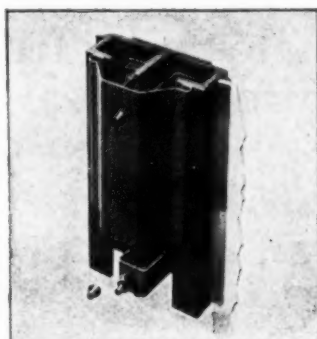


Pietrzycki High School, Dayton, Washington. Architect, Wm. A. Wells, Spokane, Wash. Contractor, J. J. Lohrenz, Spokane, Wash.

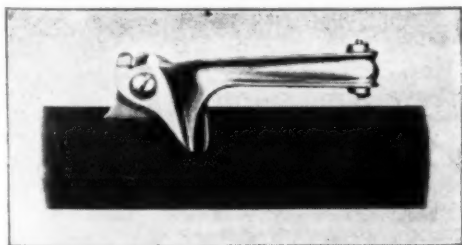
Where Beauty is Made Permanent



Phantom view of Fenestra bronze friction shoe with compression spring. These friction shoes guide the ventilator, insure its easy operation, prevent rattle and assist in holding the windows open at any desired angle.



Cut-away view of pressed steel mullion cover showing clip and method of attaching. Fenestra mullion covers fit tightly against the adjacent jamb members and provide a neat and attractive method of covering the recess between the windows.



Moulded bronze cam handle and bracket, the only hardware needed for ventilators within reach of the floor. No stay bar or chain is needed.

Beauty and permanence—and every other demand of sound and artistic school construction—meet in Architectural Fenestra. These modern steel windows present unlimited opportunities for beautiful effects, and yet their solid steel construction and careful design make them as permanent and lasting as the brick and stone which surround them. The architect who employs the slender and graceful lines of Fenestra is assured a definite addition to the artistic effect of his design.

Architectural Fenestra has many advantages, besides its beauty and permanence, which make it the ideal material for school window construction. It supplies 20% to 30% more light than wood sash. It is fire-resistant. The ventilator at the bottom may be designed to swing in, admitting plenty of pure, fresh air, without draft. The top ventilator usually swings out, and even reverses, allowing easy washing of the outside glass surface from the inside. Fenestra is weathertight and storm-proof; it cannot warp nor swell nor stick.

Architectural Fenestra is fitted with bronze hardware of artistic design, and in fact in every point in its design and construction, beauty, permanence and practicability are carefully combined.

Specifications, illustrations of Fenestra-equipped schools, and special Fenestra literature will gladly be sent upon request.

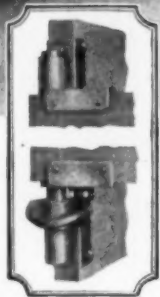
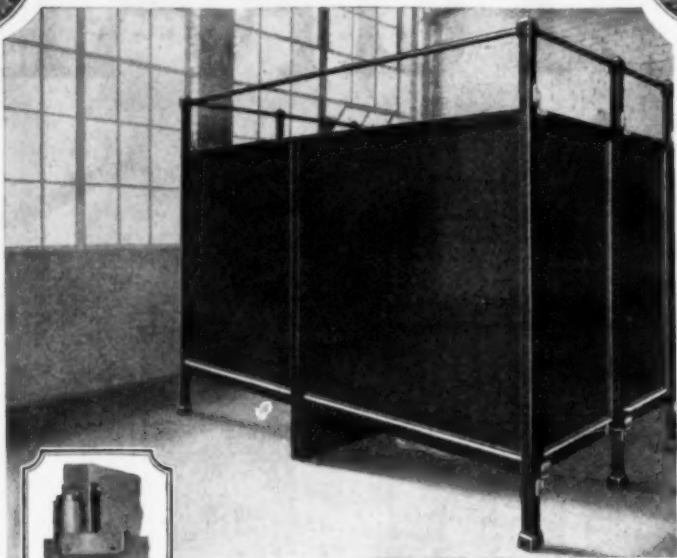
Fenestra

DETROIT STEEL PRODUCTS COMPANY

Division of Architectural Construction

2104 East Grand Boulevard

Detroit, Michigan



Sanymetal
Gravity Hinge

An Exceptional Hinge

No. 2 of a Series on
"How to Judge Metal Partitions"

REGARDLESS of all the other fine Sanymetal qualities, there are many school boards and architects who will buy nothing but Sanymetal Toilet Partitions *simply on account of the hinges*. Sanymetal Gravity Roller Hinges—patented—are everywhere accepted as the finest toilet hinge made. That's because they are simple, springless, wear-and-fool-proof. They work from the force of gravity and unfailingly compel the swing doors to stand open or closed, as desired, when the toilet is unoccupied. Their roller action is smooth and sure. They make spring replacement a forgotten nuisance.

Other Sanymetal features are: unusually rigid installation, exclusive use of Armeo Ingot Iron Sheets, high grade baked enamel finish, sanitary water-shedding base shoe, slant-lip partition mold, new door with molded stile, electro-zinc rust-proofing of all hardware, unit section design, with or without doors, adaptable to any arrangement. Sanymetal is also made for urinals, shower and dressing rooms, toilet wainscot, and corridor screens.

Write today for new Catalog No. 5

THE SANYMETAL PRODUCTS CO.

989 East 64th St.

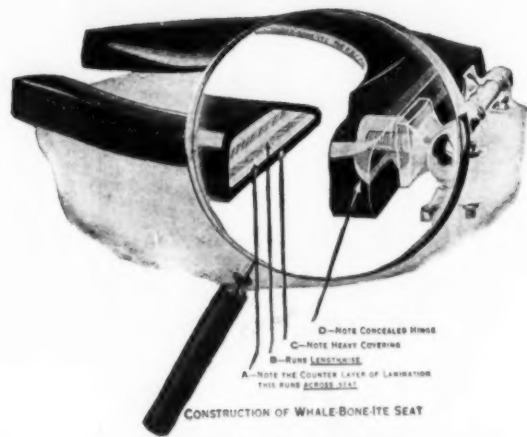
Cleveland, O.

Sanymetal
TRADE MARK U.S. REG.
Toilet and Office Partitions

THE BRUNSWICK-BALKE-COLLENDER CO.
WHALE-BONE-ITE
CLOSET SEATS

No Re-finishing ever necessary on

Whale-Bone-Ite Toilet Seats



CONSTRUCTION OF WHALE-BONE-ITE SEAT
No. 23-9—For Regular Bowls.

See that *heavy covering*. No amount of cleansing or scrubbing will wear through it.

It's not what you pay—it's the value you get for the amount you spend.

Whale-Bone-Ite provides
life-long sanitary service
at no cost for up-keep.

Always looks the Quality Product it is.

Universally ordered by Architects, Engineers and Superintendents of buildings who want The Best.



No. 21-9
For Extended Lip Bowls.

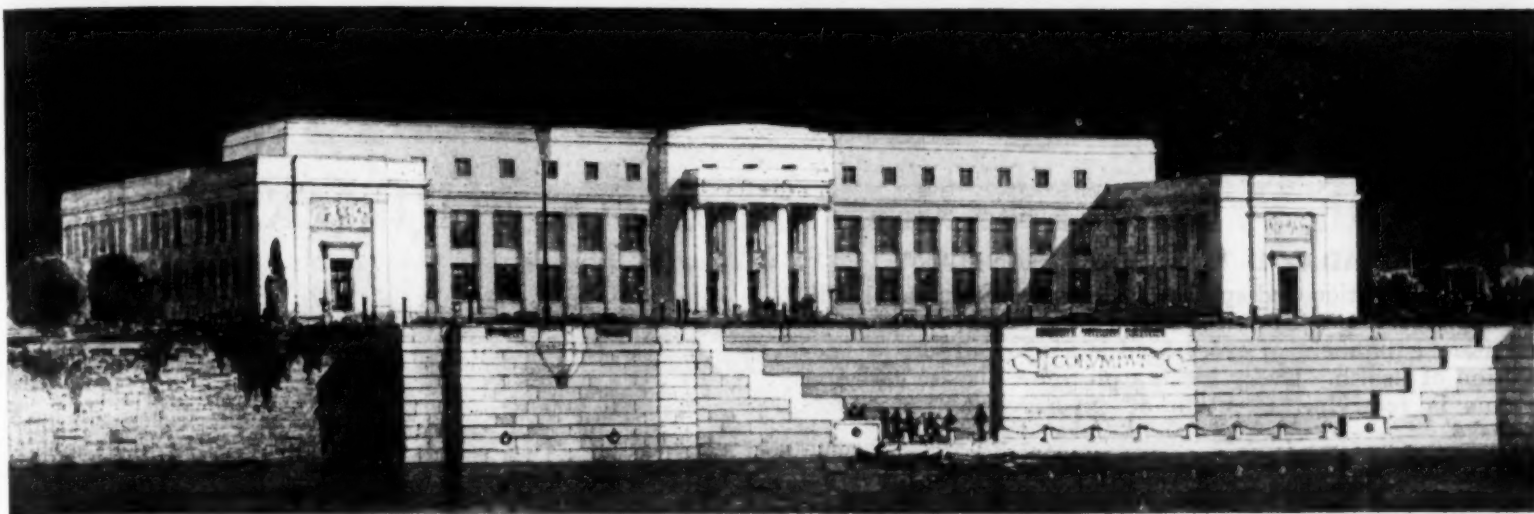
Sold by Leading Plumbers and Jobbers everywhere.

If you cannot secure locally, ask Seat Department of makers.

(See Sweet's for detail catalog.)

MADE AND SOLD BY

THE BRUNSWICK-BALKE-COLLENDER CO.
1623 S. WABASH AVE. CHICAGO



"Every School Building Should Be a Hall of Health"

—William B. Ittner, F. A. I. A.

Truscon Steel Windows of the Perfection Balanced Ventilator type were selected for the Washington-Gladden High School at Columbus, Ohio, shown above. They not only afford perfect abundant daylighting and natural ventilation, but harmonize with the architectural treatment.

Truscon Steel Windows are used in more than 2000 schools in every part of the country from the simplest country school to great national landmarks like the Washington-Gladden High School and the Massachusetts Institute of Technology. Naturally there are types and designs to meet every need.

TRUSCON

STEEL WINDOWS

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO. Sales and Engineering Offices in Principal Cities

(Continued from Page 88)

the elementary and high school courses. By keeping every child at his desk and "jamming the buildings to the bulging point" it is hoped to bring the proper authorities to a more forceful realization of the situation and to stir them to speedy action. The legislature will be asked to approve measures necessary for permitting the erection of schools more quickly.

The movement which has been designated a "stay at school drive" has been approved by Supt. Wm. L. Ettinger. The drive was opened on November 27th but reached its full force during the first week of December, designated as education week.

More than twenty organizations joined in the movement, sending speakers into more than 100 schools throughout the city to give talks to the boys and girls, particularly in the higher grades and first high school years. Forty thousand circulars have been distributed emphasizing the advantages of attending high school.

The seating situation in the schools is deemed desperate at the present time. Seats are allotted alphabetically and children whose names begin with S, T, or W are compelled to stand if no seats are available. Children complain of weariness after being compelled to stand for several hours in classrooms.

—The Indianapolis, Indiana, Times is making a campaign against the "housing of children in shacks." Prominent citizens are being interviewed as to their opinion of the makeshift structures known as portable schools.

—At Minneapolis, Minn., the city attorney has rendered an opinion to the effect that the school buildings are under the charge of the city commission and not the school board. The latter takes issue with the opinion and will secure an opinion from the supreme court on the same.

—Stillwater, Minn., is building a good-sized addition to its high school.

—Red Wing, Minn., has reached the maximum capacity in its junior-senior high school, erected five years ago with an expansion capacity of 250. The junior high school has been found a potent factor in keeping pupils in school.

—South St. Paul, Minn. A good building program has been inaugurated, with the first unit

of the buildings nearing completion. The cost of the structures will be half a million dollars.

—Monrovia, Calif. A new school building is in course of construction. The building will eventually take care of the overflow from the remaining structures.

—Plans for new school buildings for Colorado Springs, Colo., will be prepared by local architects, C. E. Thomas, T. P. Barber, and MacLaren & Hetherington. Wm. B. Ittner, the schoolhouse expert, has been engaged to supervise the plans.

—St. Louis, Mo. The school board has included in its new building program the construction of two senior high schools, which will cost in the neighborhood of one and one-half million dollars when completed; also two grade schools of eighteen rooms, each to cost several hundred thousand dollars, and an addition for the Sumner High School. The five buildings will require an expenditure of more than three million dollars.

—Under the laws of Ohio a school board may ask for a school tax of \$10.41 on a thousand. The rate granted cannot be less than \$6.61. The Cincinnati school board has asked for an increase which will bring the rate to \$7.11 on a thousand for the year 1923.

—Oakland, California, is following at present a five million dollar school building program, and is now constructing three new high schools, showing a cost of nearly two million dollars. University high school, now in process of construction, will cost over \$671,000; Vocational high school about \$535,800, and Roosevelt high school nearly \$840,000. The plans for these buildings have been worked out through close co-operation between architects, executives and classroom teachers. The needs of the academic and vocational teacher alike have been weighed in the balance, and the future of the student bodies that shall occupy the buildings has been considered at each step of the way. The final organization at the completion of the present program will include ten junior high schools. Three of these will be housed in new buildings already under way. Alexander Hamilton, costing \$308,000; Elmhurst, costing \$109,699, and Lockwood, totaling about \$190,000, while contracts are out for the Susan B. Anthony Junior High School, which will represent another \$179,000.

—Lexington, Mass. A building program is planned by the school board and superintendent. Land adjacent to the high school has been purchased for the construction of another building. The elementary schools will be reserved for the children of the first six grades so that the junior high school idea may be worked out successfully. The platoon plan of organization is proposed for the present school year to serve until the new building is ready for use.

—The County Board of Education of Eureka County, Nevada, has announced the successful completion of a campaign for a bond issue of \$90,000. The proceeds of the issue will be used for the erection and equipment of a high school, with formitory facilities attached. Mr. C. M. Luce is principal of the high school.

—Work is now well started on the Administrative building for the Denver Public Schools.

Some months ago a very suitable downtown corner 100x125 feet was purchased for the site of the new building, and early in December the Board of Education let the contract for a two-and-a-half-story building. This will provide space for all the administrative departments of the schools.

The building is being constructed so that as the city grows it may be made into a full four-story building. It is expected that the building will be ready for occupancy on or before August first of this year.

Urging School Tax Reforms.

The teachers of Illinois are awakening to the possibilities of a state income tax as a means to more adequate school support. At a meeting of the Illinois State Teachers' Association a resolution was adopted favoring a graduated income tax system. It calls for low rate of one or two per cent on incomes and a maximum rate of ten times the lowest.

In discussing the tax methods of the state the organization says:

"Illinois' system of taxing corporations is, in part, ill advised and antiquated, and in part utterly insufficient, our franchise tax rate under the statute of 1919 being one-tenth, for example, that of Pennsylvania, and the federal excess profits tax, which for a recent year took over \$122,000,000 for Illinois alone, is, since 1921, a thing of the past; therefore, our present

HOCKADAY

THE WASHABLE FINISH FOR ALL INTERIORS

HOCKADAY'D WALLS ARE SANITARY

The prevention and spread of disease among school children is receiving the attention of health officers everywhere. Sanitary equipment of every kind is demanded for the protection of health. Every lurking place for disease carrying germs is receiving attention of experts in the fight on disease.

Walls finished with Hockaday are sanitary because they are non-porous. Germs can find no lodging places on the smooth, glass-like surface of a Hockaday'd wall. These walls may be washed any number of times without the slightest injury to the paint film, for Hockaday is impervious to water. The dirt is washed OFF, not IN the soft, restful luster of the original application is restored instantly.



Let a Hockaday Specialist Help You

Our system of wall finishing includes a survey of the work to be done and the best method of doing it. The proper selection of colors so they will be restful on the eyes of the children. Our fourteen years of practical experience in wall finishing will be of great aid to you from the standpoint of cost, beauty and utility. The services of a Hockaday specialist are yours to command. There is no obligation.

THE HOCKADAY COMPANY

1823-1829 Carroll Avenue,
CHICAGO.

Send for "PAINT MILEAGE"

constitution seems to make possible a modern system of corporate taxation, and since we shall never know for a certainty what may be done constitutionally in Illinois in this direction until we try, we recommend as immediately desirable and a step towards tax reform the establishment of a system of corporate taxation designed to yield to Illinois revenues proportionately commensurate with those received from similar sources by other important industrial states."

The association will ask the legislature to provide a \$20,000,000 distributive school fund.

Equitable School Fund Distribution.

The financial policy of Pennsylvania in the school field has received attention in a survey made by Dr. Harlan Updegraff and Dr. Leroy A. King and is submitted in the form of a report. "The State," says the report "should stop the inefficient use of money involved in giving wealthy school districts as much per teacher as poor districts receive and those which levy a low tax as much as those which levy a high tax."

"Under the present subsidy law in Pennsylvania, state aid is distributed to local schools on the basis of the number of teachers. The amounts paid per teacher are fixed by the statute for the first, second and third-class districts and are one-half of the salaries paid in fourth-class districts. The fourth-class districts are those with a population below 5000. This method of distribution was the best obtainable at the time and the author gave it his support. The plan can now be tested by its results.

"Dr. Updegraff believes that the long term interests of the state will best be served, however, by a plan of subsidy that will measure state aid in terms of the ability of local districts to support their schools and the effort they themselves make so to do. Every child in the state should have equal opportunity for that education which is best for him. This equal opportunity can be given the children of the state only when the school districts of the state are able to meet equally the financial needs of their schools. The ability of a school district to support schools depends upon the amount of taxable wealth it has."

A Tilt Between President and Superintendent.

In the task assumed by President Ryan of the New York board of education, as to the status

of the school system in the number of school seatings available, present and prospective, a tilt has arisen between himself and Superintendent Ettinger.

President Ryan has intimated that he was not getting at the hands of the superintendent the information he required and was inclined to give publicity to his findings, the school seating shortage, to the public present before presenting the same to the board. Superintendent Ettinger frankly designated such action as being discourteous and deserving of censure.

President Ryan asserts that "the board needs a fact finding agency" in order to be fully informed in response to which Superintendent Ettinger hurls a challenge that such an agency has existed and is rendering good service. He says:

"The office of the superintendent of schools will furnish any and all information that the board of education may require, but of course the demands made must be relevant, reasonable, and consistent with the orderly conduct of the business of the department. The assumption, that the superintendent of schools and the professional staff, of which he is the head, are incompetent and are prone to misstate or misrepresent essential facts in relation to the schools, and that because of such facts the board of education, as a permanent future policy, will disregard the advice of the professional staff, is inconceivable. Unfortunately, such an attitude has been provocative of unpleasantness and wasteful effort in the past and cannot but work great harm to the schools in the immediate future."

President Ryan comes back with the following: "The superintendent of schools, under the law, has powers as the executive head. The board of education as a body is supreme. When that board delegated to its president specific power to look into the various bureaus of this great department it clothed him with full authority.

"We are not going to improve the system by lack of cooperation. We are not going to improve the system by abuse. I have refrained at all times from using personalities or from abuse of any character. I have dealt with cold

facts. If these facts are wrong I would like them checked up and proved, not from mere statements. It is up to the chief executive of this system, who is clothed with certain responsibilities given by this body and under the law, to do exactly as the board of education requires of him. This is not a personal matter with any member of this board. It is a matter dealing with upward of 1,000,000 children in this city. Narrowness should play no part. No individual need feel that he or she is being attacked. This inquiry will continue until every member of this board who is held responsible will have the true information, facts and figures. No camouflage of language reflecting on its president or the inquiry delegated to him by you will have any effect at all with me, and I know it will have very little effect with any thinking member of this board or the citizens of this community."

A School Endowment Association.

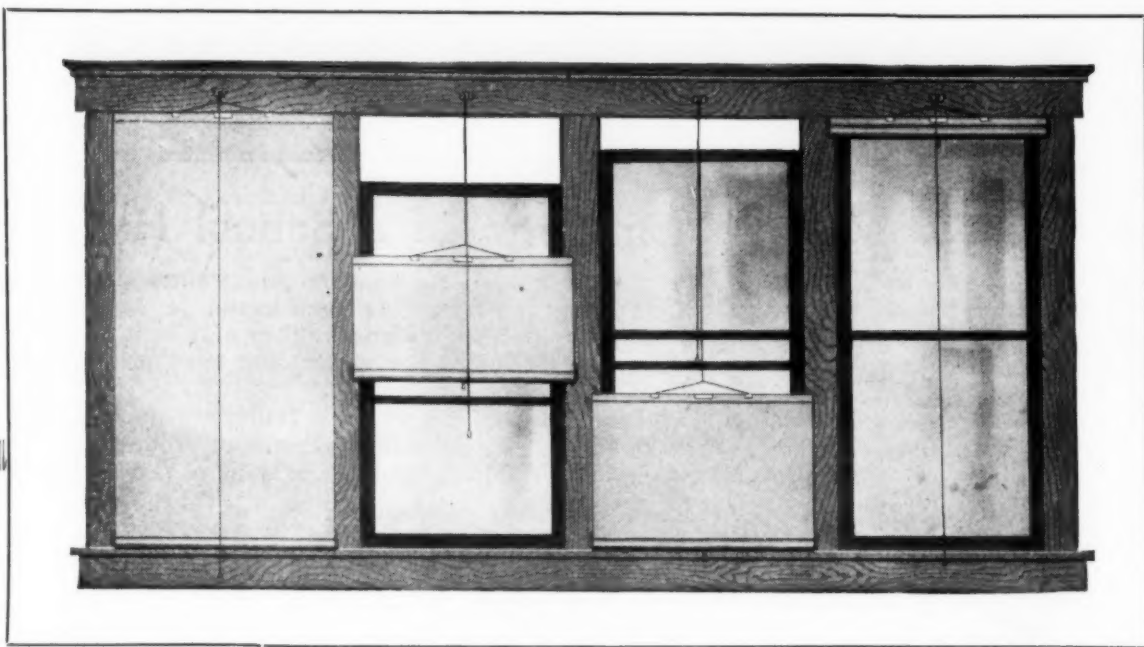
—Litchfield, Conn., maintains a most unique and useful organization known as "The School Building and Endowment Association." The purpose of the organization is to foster the spirit of education and to encourage adequate and desirable school housing. In its prospectus it makes plain that its purpose is "not to dictate in school matters, but to assist in every legitimate way."

In further explanation of its mission it says: "The endowment is not designed to relieve taxpayers from providing a reasonable sum for operating the schools, but to add to such sum in order that the children may have better school opportunities than a town of this size can otherwise provide. If it is desirable to endow the higher institutions of learning, it is at least equally desirable to endow the common schools. Thus the mass of children for the greater part of whom school opportunities will not extend beyond high school, will be helped. Moreover, the colleges and universities will become much more efficient, because of the better preparation given in the schools."

—At Fresno, Calif., the people have voted over 5 to 1 to raise the tax rate for the current year to 19½ cents on \$100 assessed valuation. The money will be used to buy four elementary and four junior high school sites.

Draper Adjustable Window Shades

Practical **Modern** **Decorative**



Draper's Adjustable Window Shades are built for service and meet every window requirement most satisfactorily, efficiently and economically. They are made of especially selected materials and are manufactured under the most rigid supervision—the secret of their extreme wearing and lasting qualities.

Their mechanical construction is simple, positive in action and absolutely "fool-proof." They have no delicate parts to get out of order. The rollers, which are specially built, are large and strong and are equipped with an oversized spring which insures their rolling and carrying qualities.

Draper's Adjustable Window Shades are guaranteed to give satisfactory service and will continue to do so over a long period of years. They are guaranteed to withstand the hard usage and abuse to which school property is subjected. Equip your school with Draper Adjustable Window Shades and have freedom from all window shade troubles.

Let us solve your window shade problems. Tell us how many windows there are in your school building, give us the size, and our experts will be glad to make suggestions and will quote you on equipping your building. This service places you under no obligation.

Descriptive literature on request.

We extend a cordial invitation to all those who attend the meeting of the Department of Superintendence, N. E. A., in Cleveland, February 26 to March 1, 1923, to visit our exhibit. Our booth number is 79.



Luther O. Draper Shade Company

Spiceland, Indiana

Wilson

Buchanan Street School,
Los Angeles, Cal.
Classrooms thrown into
auditorium.



The doors in the back, parti-
tion off stage. Note black-
board space in doors in fore-
ground.

How Many Rooms Should a School Have?

Promptly you say, one for each class.
But what about extra rooms for overgrown classes,
reception rooms, auditoriums, etc.?
No growing school has rooms enough.
There is always room for more.
That is why Wilson Sectionfold and Rolling Parti-
tions are used in thousands of schools all over the
country. With them you can divide and sub-divide

rooms whenever you want and then throw them all
into one big room again.

And incidentally they may be in any wood, design, and
finish you desire, and even provide additional black-
board surface.

For nearly half a century we have been helping schools
to solve their classroom problems.

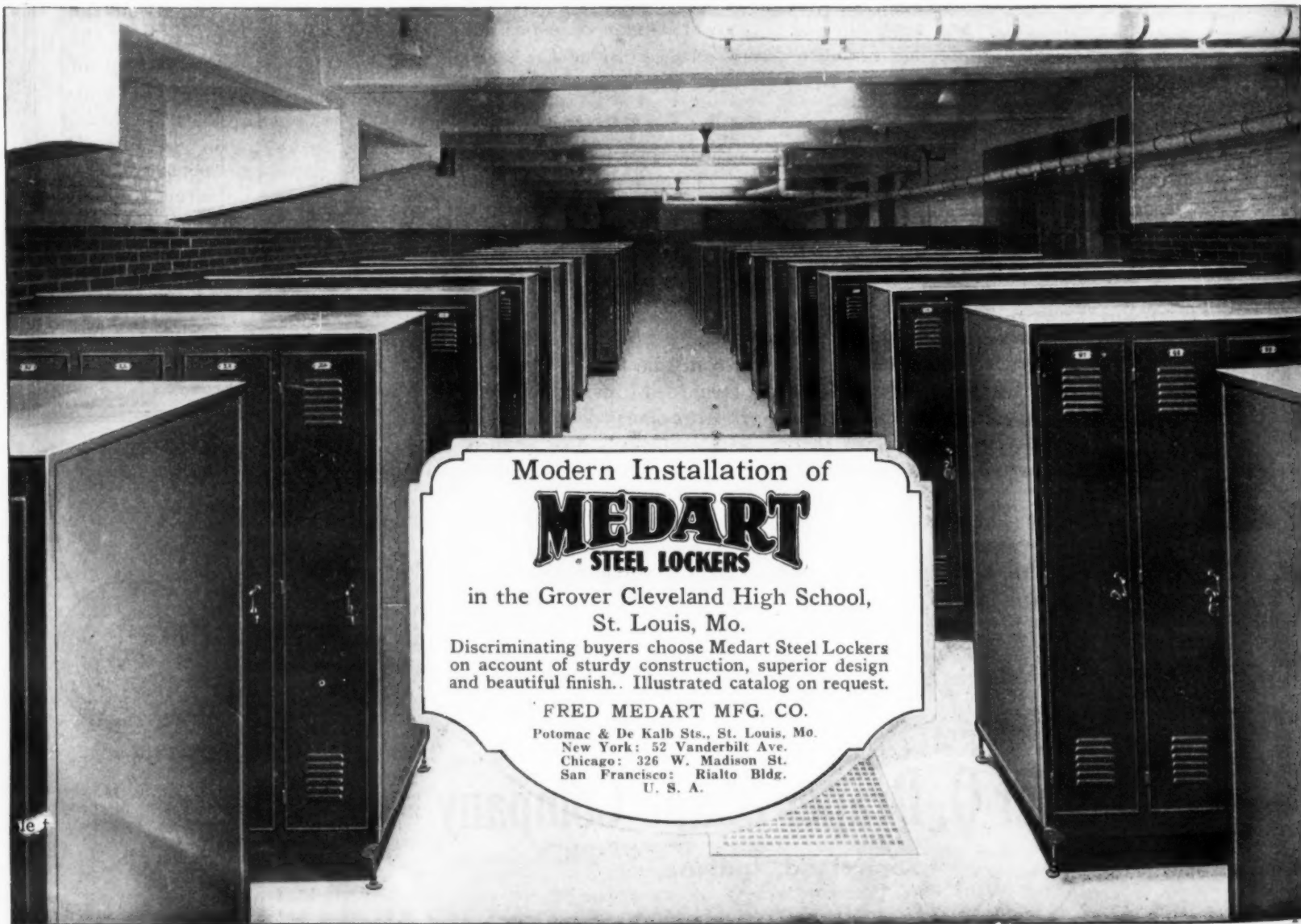
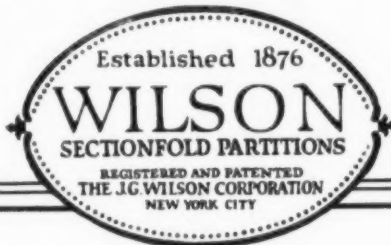
This experience may be of service to you.

Send for our new catalogue.

THE J. G. WILSON CORPORATION

13 East 36th St., New York

Offices in Principal Cities



Modern Installation of

MEDART
STEEL LOCKERS

in the Grover Cleveland High School,
St. Louis, Mo.

Discriminating buyers choose Medart Steel Lockers
on account of sturdy construction, superior design
and beautiful finish. Illustrated catalog on request.

FRED MEDART MFG. CO.

Potomac & De Kalb Sts., St. Louis, Mo.
New York: 52 Vanderbilt Ave.
Chicago: 326 W. Madison St.
San Francisco: Rialto Bldg.
U. S. A.

Fifty
superin
of the
not see
feated
state s
He rec
"But
very b
have, t
work w
and eff
Priva
judgme
tinuing
are lod
business
tions w
officials
It is
some r
office
guard
a boar
exper
to crea
county
throug
W
The
itself
leaders
school
tendent
gress
awake
"We
buildin

EVERY DAY CHILDREN

may be afforded the opportunity to save their money through the

AUTOMATIC RECEIVING TELLER THRIFT SYSTEM

This is done without burdening the teachers at all as they do not receive deposits, issue receipts, nor do any bookkeeping whatsoever.

The teachers are left free to teach the value of thrift while the lesson is being practically applied, by the children, without the least responsibility upon the teachers.

The TELLER, automatically, issues gummed, stamped receipts in denominations of pennies, nickels, dimes and quarters to the value of coins saved.

May we tell you more about it?



AMERICAN BANKING MACHINE CORPORATION 404 WRIGLEY BUILDING, CHICAGO

ENROLLMENT NAME
NUMBER OF SCHOOL BUILDINGS ADDRESS



Deplores Superintendency Changes.

Fifty-two counties in Illinois changed county superintendents of schools with the beginning of the year. Some of the superintendents did not seek reelection but most of them were defeated at the polls last fall. Francis G. Blair, state superintendent deplored these changes. He recently said:

"But the tragic side of it is that some of the very best men and women in their positions have, through defeat, been detached from a work which they were doing in a most skillful and effective way.

Private business shows the soundness of its judgment in perpetuating its policies by continuing in employment the men in whose minds are lodged the details of such policies. These business concerns know the shocks and dislocations which come to any enterprise when such officials must be changed.

It is hoped that by taking thought and counsel some new way may be devised by which the office of county superintendent can be safeguarded. Some have suggested the selection by a board instead of election by the people. The experience under our city boards is not such as to create any high degree of assurance that our county superintendency would fare any better through appointment by a board."

Washington Stirred to School Needs.

The capitol city of the nation is bestirring itself for better school support. Under the leadership of Dr. Abram Simon, president of the school board, and Dr. Frank W. Ballou, superintendent of schools, the representatives in Congress as well as the local people have been awakened to a serious situation.

"We must have \$2,000,000 for new school buildings within the next year," declares Dr.

Simon. "We must have \$2,000,000 a year for a period of five years. In all we need \$10,000,000, and it will be the duty of the community committee to fight for that amount."

The school budget for 1923 was subjected to heavy reductions, and it is now certain that there will be a deficit unless the present Congress makes an additional appropriation.

AMONG SUPERINTENDENTS.

—Margaret J. McCooley has been elected associate superintendent of the New York City school system. She was principal of a Brooklyn school and has a splendid record behind her. She had the unanimous support of the board of education. The fact that she was related to a prominent political leader was urged against her, but her efficiency and service was so pronounced that all opposition became pointless.

—Thirty-two of the thirty-nine group councils of elementary school teachers of Chicago have endorsed the educational policies of Superintendent Mortenson. This has been done, it is said, to counteract the movement of certain factions to substitute Ernest E. Cole, first assistant superintendent for Mortenson.

—Dr. Reuben Post Halleck at a California educational meeting attacked the illiteracy of the teaching profession. He held that "most of the pedagogues were fossilized and cobwebbed." He urged constant reading for self-improvement.

Superintendent John T. Scully of Brockton, Mass., believes in training and holding local talent for the teaching profession. He says:—"The chief element of stability now is the fact that many of our able teachers are attached to Brockton by home ties or by genuine liking for teaching conditions and the progressiveness of our system, and prefer to remain rather than gain financial advantage elsewhere. This acknowledgment is due to these fine teachers, lest there should appear to be an implication that all our superior teachers are leaving us.

—Something like 6,000 teachers employed in the Chicago schools have recorded their disapproval of Mayor Thompson's amusement park picnics for school children. This action was based upon the assertion that these picnics had been detrimental to the educational standards

of the schools, and in some instances destructive of the pupils' morals.

—E. E. Cortright, superintendent of the Bridgeport, Conn. schools has published a statement of the school conditions of that city. Among the features of his statement is a graph which shows what percentage of pupils is properly housed, in portables, overcrowded rooms, part time classes and in basements. Another graph shows that the expenditure for instruction is 80 per cent, maintenance 6 per cent and operation of plant 10 per cent.

—The textbook commission of Texas did not renew the state contract, but adopted a number of new books. These, it is said, will cost the state \$1,426,620 in excess of what a renewal of the old contract would have cost. The commission believed that the list of new books would be preferable over the old.

—Woburn, Mass. No-school signals for grades seven and eight and the high school have been ordered discontinued. In case of inclement weather, no-school signals will be rung for the kindergartens and grades one to six.

—A survey of school property and accommodations has been made at Dallas, Tex. The schools of the city are overcrowded and it is planned to expend \$1,000,000 in bonds for new buildings.

—The teachers' council of Washington, D. C., has adopted a portion of the new system for rating teachers, which was prepared by a special committee on ratings. The part of the plan approved by the council provides that teachers in the future be rated at the end of each year as follows:

"Teachers who stand very high in all of the first five classes shall be marked excellent.

"Teachers who stand high in four of the five first classes and do good work in the remaining class shall be marked very good.

"Teachers whose work is good but not excellent in the first five classes shall be graded good.

"Teachers who are in the main doing fair work, but who show indications of weakness in some of these five classes, should be marked fair.

"Teachers recommended for dismissal should be marked unsatisfactory. Before such unsatisfactory grade shall be effective as a basis for

AT THE CONVENTION

IN SPACE 93

The Lyon Exhibit of steel lockers and cabinets will again include the latest ideas in the application of these products to school uses.

Our Engineers in charge of the exhibit are thoroughly conversant with school problems and will be at your service during the period of the exhibit.



LYON METALLIC MFG. CO.

AURORA, ILLINOIS

dismissal it must be verified by two other supervisory officers for a period of at least one semester.

"The few teachers who are excellent in the first five classes and who also excel in the qualities of class 6 shall be rated as superior teachers."

That part of the plan on which the council failed to agree and which will be recast by the rating committee provided that:

"A mark of fair shall be interpreted as a passing mark, but shall subject the teacher receiving it to intensive supervision for the following year. A mark of unsatisfactory shall be equivalent to a recommendation for dismissal.

"Teachers shall be graded under the following heads and shall, in addition, receive a general grade expressing the final judgment of the supervising officer:

"1 Teaching and class work.

"2 System, order, promptness, care of materials, attention to heating, lighting, ventilation and hygiene.

"3 Self improvement, civic spirit, participation in school and local activities.

"4 Health (excluding artificial standards of under and over weight), cheerfulness, liking for human beings and tolerance.

"5 Applied knowledge of related subjects.

"6 Initiative, personality, inspiration, creative force, school betterment, high potential value to schools."

—The necessity of a higher pay scale for teachers in order to maintain the present standards of education has been emphasized by Dr. W. G. Chambers of Pennsylvania College. Dr. Chambers held that the minimum pay for educators should be \$1,800, in order that teachers need not have to seek other employment during the summer months.

—Erie, Pa. In line with the idea of affording equal opportunities for all, the school board has authorized the establishment of a department for special development classes. For some time it has been recognized that children are not all alike but are all different. For the majority of children the regular course of study serves very well but there are exceptional children who do not get on well with the regular course. Not less than 240 children in the city schools of

Erie have been recommended by the principals for special development classes.

It has been the purpose of the board to establish six centers conveniently located which will give exceptional boys and girls equal opportunities with the rest. A special course of study, where one-half the time is taken up with work in manual arts and half with a modification of the regular academic work, will be used. In addition to having a special course of study, the classes are limited to fifteen in number and are thus afforded better opportunities for individual help.

—Clay District, Harrison County, W. Va., has extended medical inspection to each rural school, has introduced the Courtis practice tests in arithmetic for all the schools, and has raised the standards for teachers by requiring normal certificates or their equivalent. More than half of the teachers have attended summer school and several are taking extension work. A wireless system has been installed in the high school.

—Complaint is once more made that new school books have been received which contain advertising. The complaint comes from Columbus, Ind. The Chicago publishers have been notified that the books have been rejected.

—The Kingston, N. C., School Board presents the annual audit of its school finances to the public in a full page statement which appears in the local newspapers. The statement aims to show how every dollar dedicated for school purposes has been expended.

—Acting on a recommendation of Superintendent W. F. Webster, the Minneapolis, Minn., school board has voted to employ student readers to assist high school students who have defective eyesight. It will cost approximately \$120 a year for each pupil; five boys and girls in each high school will receive this aid.

—Student self-government exists in all of the high schools of Oakland, Calif., and in many of the junior high schools, while certain of the elementary schools follow a like plan of student self-discipline as in the Melrose school junior republic.

—"There is a new professional spirit permeating the ranks of the teachers in this state," said State Superintendent Burris of Indiana recently. "With the increase in teachers'

societies, teachers took on new hope. They are eager to finish their training courses and to make themselves more forceful representatives of their chosen profession. The increases in cost of maintaining the teachers' training schools must mean better schools throughout the state. Upon no other ground can the increase be justified."

—Several hundred children of the Scottsbluff, Nebraska, district work in the sugar beet fields for four to six weeks in September and October. In order to meet the provisions of the compulsory attendance law the district provided a summer school of six weeks, June 17 to August 25. There was an enrollment of 342 children with an average attendance of over 300. Ten teachers were employed. The experiment was altogether satisfactory and will probably be made permanent.

—There was inaugurated in connection with the Scottsbluff, Nebraska, schools last year a department of part-time and evening instruction. The board for vocational education for the state of Nebraska paid three-fourths of the expenses and a local district one-fourth. Classes were organized in home millinery, home nursing, made-over clothing, home cooking and home making. Over three hundred adults registered for these various courses. The work was so satisfactory that there is a popular demand for the continuation of the adult education.

—The Winfield, Kan., schools have a unique situation in that for years, they have more pupils enrolled in the upper six years of the system than in the lower six years of the system. The total enrollment of the city school system runs about twenty-one hundred pupils each year, while the junior-senior High School enrollment usually exceeds the twelve hundred mark. This situation is accounted for partially by the fact that there is very little loss of pupils between the grades, as the compulsory education age is reached, and partially by the fact that the school attracts each year a large number of graduates from the rural schools in the districts surrounding the town.

—Putnam, Conn. The board of education has asked the voters to appropriate an additional \$5,000, making available a total of \$35,000 for the construction of the proposed Putnam School addition.

You protect their lives at "school time"



Part of an installation of 1121 feet of Anchor Post Chain Link Fence around municipal playground at Bayside Park, Jersey City, N. J.

Protect them at "play time" too

Enclose your playground with that never-failing guardian and protector—a sturdy Anchor Post Fence.

It will safeguard the children against speeding vehicles, snapping dogs, and neighborhood "bullies." While permitting fullest freedom for games and romping, it offers no obstruction to cooling breezes and healthful sunshine.

Call in an Anchor Post fence specialist. He will gladly place at your disposal our many years' experience in building and erecting fences for playground, tennis court, and campus. And ask for "THE ILLUSTRATED ANCHOR POST"—an interesting bulletin on "Fences and Railings for Schools and Colleges."

For quick service, write, phone, or wire the nearest Anchor Post office or sales agent.

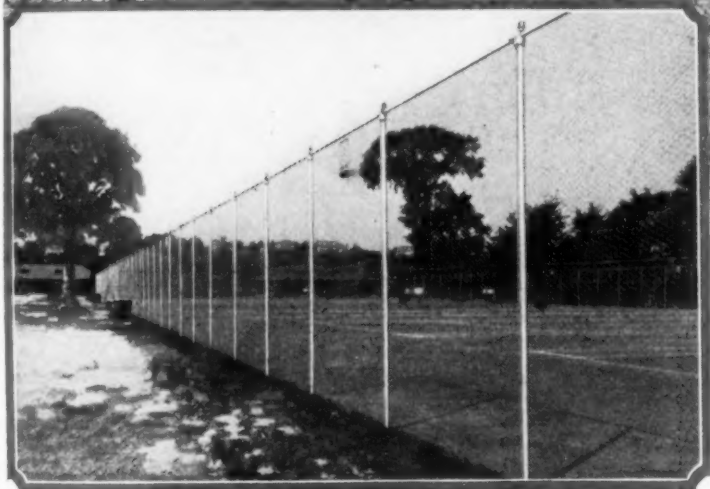
ANCHOR POST IRON WORKS, 52 Church Street, New York, N. Y.

BRANCH OFFICES:

BOSTON, MASS. 79 Milk Street	CLEVELAND, OHIO Guardian Building	HARTFORD, CONN. 902 Main Street	PHILADELPHIA, PA. Real Est. Trust Bldg.
CHICAGO, ILL. 8 So. Dearborn Street	DETROIT, MICH. Penobscot Building	MINEOLA, L.I., N.Y. 167 Jericho Turnpike	PITTSBURGH, PA. 541 Wood Street
CINCINNATI, OHIO 141 East Fourth Street			ROCHESTER, N. Y. 604 Main Street East

SALES AGENTS IN OTHER CITIES

2449-G



Anchor Post Chain Link Tennis Court Enclosure at Travelers' Insurance Co., Hartford, Conn.



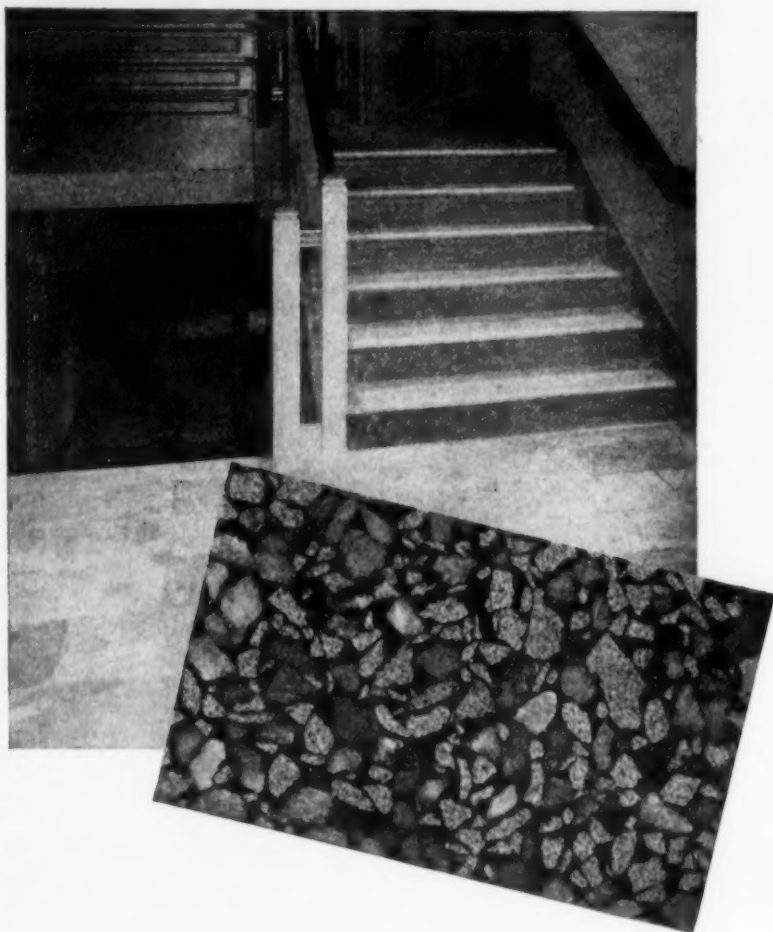
Anchor Post Electric-Weld Railing at Hartford High School, Hartford, Conn.

FIRM — BECAUSE THEY ARE ANCHORED

Anchor Post Fences

PERMANENT — BECAUSE THEY ARE GALVANIZED





ALUNDUM SAFETY TILE

ALUNDUM STAIR TREAD TILE has a plane surface without grooves, corrugations or depressions and a rounded nose that remains slip-proof always.

ALUNDUM SAFETY AGGREGATE TILE makes an attractive flooring and is furnished in combinations of colors which will harmonize with the surroundings. This is an extremely attractive tile made of marble chips and Alundum Safety Aggregates bonded with cement. It is used for entrances and corridors.

It is a beautiful slip-proof, durable floor—a safety floor that can be kept clean. Special borders, bases and stair treads can be made according to the architect's direction. Pre-cast Alundum Safety Aggregate Treads are furnished to match the floor tile.

NORTON COMPANY

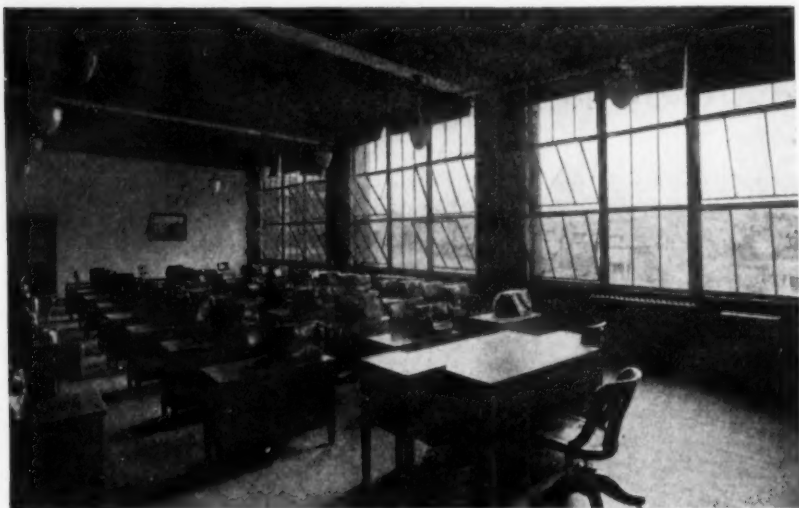
Worcester, Mass.

New York
53 Park Place

Chicago
11 N. Jefferson St.

Detroit
233 W. Congress St.

T-55



Lupton Projected Sash

So handy to use! Just push or pull—no fasteners needed. Cannot warp, stick or rattle like wood windows; needs no weather stripping to make it snug. It's a window teachers like to use.

Cost is surprisingly low. Ask your architect, and write for Catalogue No. 110.

DAVID LUPTON'S SONS COMPANY

Clearfield and Tulip Sts. Philadelphia

*Cleveland New York Pittsburgh Boston St. Louis
*Chicago *Detroit *Buffalo *Atlanta *Baltimore

*Warehouses in these cities

Agents in other cities

Canadian Manufacturers: The A. B. Ormsby Co., Ltd., Toronto

Lupton

INVESTMENT VALUE

Holtzer-Cabot

FIRE ALARM AND SIGNAL SYSTEMS

*For Schools, Hospitals, Industrial
Buildings, Hotels, Factories, Etc.*

The importance of adequate fire alarm and signaling systems in hospitals, schools, factories and public buildings can not be overestimated.

The premier protection against loss of life and loss of property due to unforeseen fires is a reliable and efficient alarm system. The Holtzer-Cabot Electric Co. have been making fire alarm and signal systems for more than forty years. Each aspect and condition pertaining to warnings has been thoroughly investigated.

The Holtzer-Cabot Electric Co. will be pleased to supply architects and engineers with catalogues and booklets detailing the various kinds of fire alarm and signal systems which they make and give details of the numerous hospitals, schools, factories and other public institutions where Holtzer-Cabot Electric Co. systems have been installed.

THE HOLTZER-CABOT ELECTRIC CO.

Electric Signaling Systems

HOME OFFICE AND FACTORY
125 Amory Street, Boston, Mass.

BRANCH OFFICES:

Chicago, Ill., 6161-65 S. State St.
New York, N. Y., 101 Park Ave.
Philadelphia, Pa., 807 Otis Bldg.
Detroit, Mich., 1051 Book Bldg.
Cleveland, Ohio, Union Bldg.
Baltimore, Md., 1104 Union Trust Bldg.
San Francisco, Cal., 408 Claus Spreckels Bldg.
Minneapolis, Minn., 627 Metropolitan Life Bldg.

Safety, Service and Durability

MEDART Playground Equipment has many exclusive features and refinements that are the result of our long experience in the manufacture of Playground and Gymnasium apparatus. For over 50 years MEDART Equipment has been the choice of teachers, physical educators and civic officials.

MEDART

PLAYGROUND EQUIPMENT

Medart Catalog "M-5," sent free on request, fully illustrates and describes the entire MEDART Line. Prices are lower than you would expect for apparatus of such high character. Send today for Catalog "M-5" and price list.

Fred Medart Manufacturing Co.

Potomac and DeKalb Sts., St. Louis, Mo.

New York
52 Vanderbilt Ave.

Chicago
326 W. Madison St.

San Francisco
Rialto Building

PERSONAL NEWS OF SUPERINTENDENTS

—James W. Wilkinson, superintendent of the Longansport, Ind., schools died December 6th. He committed suicide by shooting himself. Cause unknown. Mr. Wilkinson came in 1920 from Goshen, Ind., where he had also served as superintendent.

—Charles A. Lee the newly elected superintendent of Missouri is only thirty-one years of age, and is said to be the youngest man who has thus far held the position.

—During the present year three associate superintendents of the New York City schools, Drs. Shimer, Walsh and Meleney will retire because of age. Their successors will be chosen by the board of education.

—Miss Annie Webb Blanton was succeeded at the beginning of the year as state superintendent of schools for Texas by S. M. N. Marrs.

—Springfield, Mass., has recently lauded its great schoolmasters of recent decades, Thomas M. Balliet 1887-1904; Wilbur F. Cordy 1904-1911; James H. Van Sickle 1911-1922 all of whom have served as superintendent of schools for that city. A writer holds that these men had placed Springfield upon the educational map.

—S. Clinton Morrill succeeds Carl W. Ross of Beech Grove, Ind., as superintendent. In a citizens' protest meeting the reinstatement of Mr. Ross has been demanded.

—A school fracas at Somerset, Texas, resulted in the death of two men, one of them W. A. Chapman, superintendent of schools. The row started over the discharge of a teacher. Chapman and a man named Harwood, the husband of the teacher, got into words. The published story has it that Chapman shot and killed Harwood, whereupon A. W. Halliburton killed Chapman. Halliburton is under arrest.

—Supt. Frank H. Hill of Marblehead, Mass., has been reelected for three years.

—Mr. A. L. Richards, of Elk City, Okla., has been elected superintendent of schools at Vinita, to succeed M. R. Floyd resigned.

—Supt. J. E. Coleman of McCracken County, Kentucky, has been elected president of the Department of Superintendence, of the Kentucky Educational Association. Mr. J. W. Riley, of Campbell County, was elected vice-president, and Mrs. Mary B. Ross was elected secretary-treasurer. Mr. J. W. Bradley, of Middlesboro, was elected chairman of the city superintendents' division.

—Mr. D. W. Horton of Lafayette, Ind., has accepted the superintendency at Logansport, succeeding the late J. W. Wilkinson.

—William Thomas Reid, president of the University of California from 1881 to 1885, died at his home in Berkeley, on December 19th. Mr. Reid was 79 years of age.

—Mr. M. L. Beanblossom, superintendent of schools at Lawrenceville, Ill., met instant death in an automobile accident near Winchester, Ind., on December 27th.

—State Supt. Katherine Morton of Wyoming has been reelected for another term.

—After a service of 43 years in New Jersey schools, Mr. William C. Armstrong, for six years principal of Public School No. 14, Elizabeth, N. J., retires February first from school work. Mr. Armstrong came to Elizabeth in 1910 and taught for some time in the Battin High School. Later he became assistant principal of one of the grade schools, changing to another school as principal the following year. Previous to coming to Elizabeth, Mr. Armstrong was head of a high school and for eleven years was superintendent of schools. Mr. Armstrong was a graduate of Princeton in the class of 1877. He is the author of a number of books and has acted as historian of the New Jersey Historical Society.

—Supt. A. A. McDonald of Sioux Falls, S. D., has been appointed a member of the State Board of Education which administers the funds for vocational education given by the federal government.

—The Arkansas law providing for county superintendents of schools has been declared unconstitutional by the Crawford County Chancery Court at Van Buren, in the case of

J. E. London, against the county board of education, the county superintendent and county treasurer. Under the ruling the office of Supt. J. P. Bingham is declared vacant, and the school board and county treasurer are barred from paying the salary of the official. The court held that the legislature was without power giving boards of education the right to fix the salary of the superintendent, and the law was therefore unconstitutional and void.

—Supt. J. A. Doremus of Aurora, Neb., has been reelected for a three-year term, at a salary of \$3,000.

—Mr. A. C. Moreland, formerly county superintendent of schools in Bates County, Mo., has been made chief clerk in the Office of the state superintendent of schools at Jefferson City. Mr. W. G. Dillon, of Butler, has been made statistician in the same office.

NEWS OF OFFICIALS.

Mrs. Clara M. Savage has been elected secretary of the board at Rockford, Ill. Mrs. Savage succeeds Mr. E. M. St. John who held the position for the last eight years.

—Mr. W. R. McNeal has resigned as superintendent of buildings and grounds at Seattle, Wash.

—Homer W. Anderson, for the past three and one-half years assistant Director of Research in the public schools of Detroit, Michigan, has become Assistant Superintendent of Schools for Denver.

A large part of his work in the immediate future will be supervision from an educational standpoint of the construction of new school buildings in the city which were authorized by a bond issue of \$6,150,000 on October 10, 1922.

Mr. Anderson is a graduate of Des Moines University, and of the State University of Iowa, where he received his Master's degree. He served as teacher, principal and school superintendent in several Middle Western cities before assuming his duties in Detroit in 1919.

In addition to acting as assistant superintendent of schools under Superintendent Newlon, Mr. Anderson will have charge of the department of classification and statistics, succeeding Dr. George W. Frasier, who resigned to become dean of the graduate school of the State Teachers' College, at Greeley, Colo.

FOUR IN ONE *Light*



The Ideal Light for Schools

THE Four-In-One is the ideal light for schools. It throws the light down on the work where it belongs, instead of in the eyes where it doesn't belong. Its soft, perfectly diffused light is totally free from glare. Its light source is the Mazda "C" lamp, the most economical light known.

If you plan installing modern fixtures, our lighting experts, who will give individual study to your particular needs, are at your service. They will determine whether your present lighting is sufficient in both quantity and quality, and whether it is properly toned and correctly distributed. You can rely absolutely on their recommendations as to just what changes should be made in order to relieve eye strain which results from incorrect lighting and causes defective eyes.

Send for our booklet showing the various styles of the Four-In-One Light and describing its principle in detail.

Our service department will gladly furnish architects or school boards with complete blueprints and specifications showing model equipment for the proper lighting of every location.

THIS SERVICE IS FREE

L. PLAUT & COMPANY

432 East 23rd Street

New York



MILK IN THE SCHOOLS.

During the past few years a custom has developed and spread throughout the country which is undoubtedly of foremost importance to the health of our future generations; namely, the serving of milk in the public schools. The great importance which milk plays in the diet of the growing child has been given wide attention, and is becoming well established in the minds of all those interested in child welfare.

"There is no better time according to the Bulletin of the Wisconsin State Department of Health" for the child to receive a portion of his milk ration than during the school lunch. It is necessary for the milk inspector to see not only that milk of a good quality is served, but that it is served in a sanitary manner. Caution should be taken either to see that the milk is not delivered to the school until lunch time; or, if delivered at an earlier hour, to see that it is properly iced and stored until served.

"All milk for the school lunch should be delivered in bottles, as this is much more sanitary. The tops of the bottles should be thoroughly washed before opening. The milk should be drunk without pouring from the bottles, for children will frequently fail to keep individual cups or glasses in a clean, sanitary condition. Even more sanitary is the use of individual straws. Sometimes bottles are capped with a special cap for school use.

"Inspectors should make frequent visits to the schools where milk is being served. Samples should be taken to determine that milk of good quality is supplied by the dairies, and the inspectors may be of great assistance in seeing that it is handled and served at the schools in a sanitary manner.

"Inspectors in cities where this custom has not been adopted would do well to advocate and encourage its adoption.

"The dairy inspector should interest himself in this phase of dairy inspection, not only because he is expected to provide a clean and safe milk supply, but because the movement has important health significance in increasing the health and vigor of growing children."

HYGIENE AND SANITATION.

—Cranston, R. I. Medical inspection work has brought good results under the new inspectors. The school nurse reported 103 children treated at school during the month and 126 home visits. Two children were sent to the tuberculosis clinic, five were sent to private physicians, and 25 were operated on for minor troubles.

—School children of Peoria, Ill., recently took part in the observance of eye conservation week. Every school was asked to join in establishing the new semi-annual custom of eyesight conservation day, planned as a universal and permanent contribution to the American system of education. The purpose of the day in schools was to discover defects in vision or symptoms of a defect rather than to determine the degree of deficiency.

—Hammond, Ind. A clinic has been established in one of the schools. Each dentist gives one-half a day a month to the work and children are sent to the clinic upon the recommendation of the medical department. Children whose parents can afford to pay for treatment are sent to their own dentists. Children who cannot pay are sent to the clinic upon the consent of their parents. The work has been remarkably successful and those in charge of the clinic are pleased with the progress made.

—Mitchell, S. D. Seventy-five per cent of the children in junior high schools and grade schools suffer from some physical defect, according to Miss Beth Olson, city school nurse. Examinations by the nurse disclosed 1,366 different defects among 1,440 children. In many cases, a single child was found with more than one defect.

Of the 1,366 defects discovered, medical treatment was given in 718 cases. Defective teeth appeared to be the most prevalent of any ailment. Out of the 1,440 children examined, 509 had bad teeth and 412 of these obtained treatment. Diseased tonsils affected the health of

368 children and 111 suffered from malnutrition.

DEATH OF MR. MEYER

Mr. Chas. H. Meyer, secretary and business manager of the school board, Johnstown, Pa., died suddenly January 9th following an attack of heart disease. Mr. Meyer was widely known as one of the ablest school board secretaries in the east and was prominent as a member of the National Association of School Accounting and Business Officials.

Mr. Meyer was born August 30, 1873, at Johnstown and received his early education in the schools of his native city. He was graduated from Dickinson College in 1898 and received his law degree from the Dickinson Law School in 1900.

He was for one year an elementary school principal and then entered the Johnstown high school where he was an instructor for ten years. In 1911 he became secretary of the board of education. In 1916 his office was expanded to include the general business management of the school department. He was for years a member of the Association of School Board Secretaries of Pennsylvania and president of that organization for a year.

New State Superintendent for Missouri.

Mr. Charles A. Lee, superintendent of schools at Butler, Mo., in December, was appointed State Superintendent of Public Instruction of Missouri. Mr. Lee is said to be the youngest superintendent to hold that office, being only 31 years old.

Charles Lee was born in Phelps County, Missouri in 1891. He attended the rural schools of the county and later taught for six years. He was graduated from the Warrensburg State Teachers' College and from the University of Missouri, where he received the degree of bachelor of science.

Mr. Lee has had seven years' experience in high school teaching in the state. He taught one year in the California schools and was principal of the Lamar schools for two years. He served as superintendent of schools at Butler for four years. In accepting the office of state superintendent, Mr. Lee holds the honor of being the first graduate of the University to fill that position.



Murphysboro High School
MURPHYSBORO, ILL.

Quality that's real economy

Enduring service can be expected from equipment only when quality has been put before any other consideration. This fact is too often overlooked. The name "Master-Made" on school cafeteria equipment is the hallmark of the finest that is made. It is our guarantee of the highest standard of excellence.

*Planning and consultation service are offered without fee or obligation.
Send for our School Cafeteria Portfolio Y93—it will be of real help to you.*

ALBERT PICK & COMPANY

208-224 West Randolph Street, Chicago, Illinois



One of the eleven Vitrolite equipped washrooms in the Capitol Square Theatre.



Interior view showing section of proscenium arch and one of the elaborate exits.

Specified—

Where Only the Best Would Serve

When C. Howard Crane designed the luxurious \$1,500,000 Capitol Square Theatre, Detroit, authorities

recognized that a masterpiece of exquisitely balanced beauty and permanence was

created. Every material specified was a leader in its class. And where service requirements were heaviest—in the washrooms—carload upon carload of snowy, lustrous Vitrolite slabs were used for partitions and wainscoting—because Vitrolite marks the farthest advance in the quest for an interior structural slab material that combines beauty, sanitation and permanence.

Laboratory tests show that Vitrolite possesses an unmatched range of qualifications for wall and ceiling surfacing. Non-porous. Stain-proof. Instantly cleaned. Looks new after a lifetime of service. Seven times harder than marble. Wears like the Pyramids—used the world 'round. Ideal for places where service conditions are most difficult—in hospitals, schools and all public and private buildings.

THE VITROLITE COMPANY
Chamber of Commerce Building—Chicago

*Service Organizations in Principal Cities
in America and Overseas*



Nothing is more beneficial to growing Youth than soul satisfying body-flushing drinks of water in the open air; before school, at recess time, after school.

These Murdock Anti-freezing Fountains should be placed in every school yard.

MURDOCK OUTDOOR BUBBLE FONT (PATENTED)

FOOL PROOF

CLIMATE PROOF

EITHER VERTICAL BUBBLE OR ANGLE STREAM TYPE

Used in cities, large and small, throughout the United States in schoolyards, playgrounds, parks and streets.

Made by a company of seventy years' experience in outdoor water devices.

Also indoor fountains for schools.

Write for complete information and booklet
"What an Outdoor Drinking Fountain Should Be."

The MURDOCK MFG. & SUPPLY Co.
"THE ORIGINAL HYDRANT HOUSE"
CINCINNATI, OHIO.

Makers of Anti-Freezing Water Devices since 1853



Lincolnwood School, Evanston, Ill. Perkins, Fellows & Hamilton, Architects.

The Right Kind of Floors Are Imperative in Schools

A hard, rasping floor is very tiring. The noise from them is distracting, and prevents best efforts by teachers as well as pupils. A floor that is dusty, or that has cracks, is impossible to keep clean, and is detrimental to health.

Overcome all these serious common faults by laying T-M-B Flooring over all school floors, in class rooms, assembly rooms, corridors—everywhere.

T-M-B Floors are highly sanitary, having no seams or cracks. They have a dense, dustless texture that is noiseless and warm underfoot. Their resiliency makes them restful to walk on. They will not show wear for many years, and can be installed and maintained at a low cost. An investigation will conclusively demonstrate their superiority.

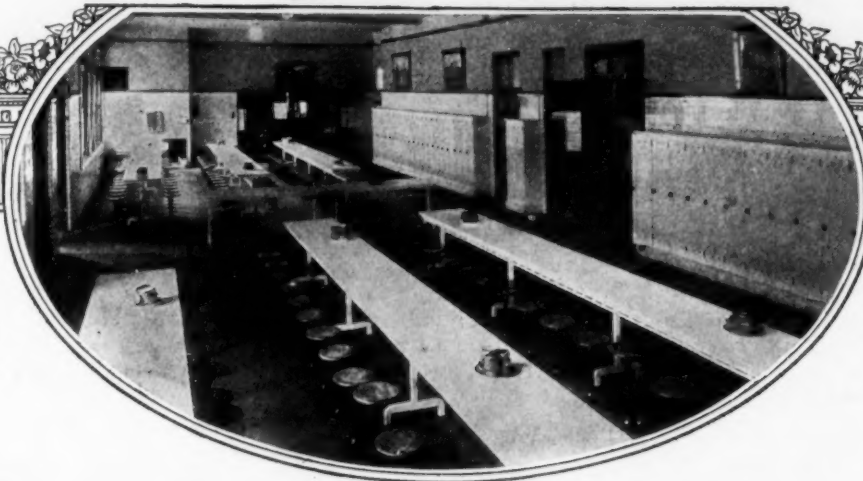
Write Dept. 5
for full information

T-M-B
FLOORING

THE Mastic Floor

OS. MOULDING BRICK CO., 133 W. Washington Street, Chicago

Sani Products



Sani-Onyx is better than Marble or Tile for Wainscoting, Paneling, Baths, Toilets, Showers and Floors. Specifications requested for prices on complete installations.

A recent installation in the Spaulding School, Chicago, Ill., featuring No. 313-T Sani-Onyx Top Tables with Sani-Metal Bases and 411-P Stools.

Lunch Room Equipment that is Easy to Clean

Educators now realize the necessity of school lunchrooms—a place where pupils can get a good, wholesome meal at reasonable cost. The illustration above is typical of a modern school lunchroom equipped with **Sani-Onyx** Top, **Sani-Metal** Base Tables. We have made hundreds of similar installations in schools all over the country. For those who want the utmost in sanitation and durability, this type of equipment is more widely used than any other. You should investigate thoroughly before specifying your lunchroom equipment.

Sani-Onyx Table Tops are radiantly white, durable, easy to clean and as hard and smooth as polished glass. This type of material is non-absorbent and will not collect grease or dirt. Fruit juices and even the strongest acids have no effect on **Sani-Onyx**. No

matter what you spill, a damp cloth will remove it instantly. **Sani-Metal** Table Bases are made of special metal, heavily coated with porcelain enamel. There are no crevices for dirt and grease to collect. Wet brooms and mops which are so injurious to the ordinary varnished kind, have no effect on **Sani-Metal**. A school lunchroom is a permanent investment and requires permanent equipment. We have it.

Write for Catalogue

We will be glad to send you our illustrated literature showing all kinds of **Sani** equipment suitable for schools and colleges. Our engineering department will lay out your space free of charge.

These materials may be purchased from local distributors. Our export department completely equipped to handle foreign business.

Sani Building, North Chicago, Ill.
Canadian Factory: Sani Products Co., Ltd.
284 St. Helens Ave., Toronto, Canada

Sani Products Co.

Sani
ONYX

SCHOOL BOARD NEWS

FINANCIAL INDEPENDENCE FOR SCHOOL SYSTEMS.

Prof. George W. Frasier, an authority on school finance and taxation, advances the following reasons why school boards should be financially independent of the municipal governments:

"(1) Fiscal independence is right in principle. Education is a function of the state. It is so declared in state constitutions and laws, and it has been so ruled in the supreme courts. No municipal government has a 'right' to control the schools within its city.

"(2) Fiscal independence is not a violation of the correct principles of taxation. The state creates 'municipalities' and 'city school districts.' The same authority gives to both the right to levy and collect taxes. The two corporate organizations are not competing for the revenue of a city, but are both, from a legal standpoint, collecting taxes for the state for a certain definite purpose set forth by the state.

"(3) Fiscal independence works better in practice. This point is evident to those familiar with the school systems of America. A system that can plan and be sure of funds with which to carry out these plans has a great advantage over the one that must beg its funds from the city hall.

"(4) Fiscal independence makes for a continuity of educational policy. To have much money this year, and little next, to be uncertain as to what is coming the next year, makes extensive plans impossible. Every big undertaking in a school system should be planned far ahead. If junior high schools are to be established throughout the city, plans should be made for many years in advance. A certain definite

number of buildings should be constructed each year, and the whole city system reorganized step by step. To begin such a program and find the funds shut off the second or third year by the municipal government destroys the possibility of a continuous educational policy.

"(5) Fiscal independence provides adequate financial safeguards for a community. Those who favor fiscal dependence for school systems argue that a school board with legal taxing powers would bankrupt a city with its excessive expenditures. Such is not the case, because the state provides adequate financial safeguards. The following are examples of the different types of limitations placed on city school boards by various states:

"(6) Fiscal independence tends to keep politics out of the schools. If school board members are appointed by the mayor and change with the party in power they become political appointees and membership on the board becomes a political job. If the school board must appeal to the city hall for its funds, the city hall demands in return for funds the right to dictate policies. This political interference with the schools is very common in fiscally dependent school systems. When school teachers are compelled to court the favor of the ward politician in order to get appointed; when janitorial jobs are looked upon as political plums; when clerical positions in the school administration are 'passed around,' school efficiency must suffer. When the school board is entirely independent of the city hall; when its members are elected on a non-partisan, city-wide ticket, then the schools are free from politics to a very large extent."

AMONG BOARDS OF EDUCATION

—The school board at Knoxville, Tenn., is seeking a change in the city charter whereby it will have the right and the responsibility of managing the school finances. It desires separate tax funds and a minimum levy of 45 cents on each \$100 property valuation and a maximum of 75 cents.

—Harry B. Chambers, vice-president of the board of education of New York City resigned. "I have permitted my work on the board to cripple me financially," he said, "and cannot afford to serve any longer."

—Lowell, Mass. The school janitresses have been given an increase from \$24 to \$25 a week. The increases became effective January first.

—St. Louis, Mo. The school board has ordered that it be addressed in communications as "members of the board" instead of "ladies and gentlemen." The board comprises nine men and two women.

—Coeur d'Alene, Ida. The board has adopted a rule barring married women as teachers after the present year. In case an employed teacher marries, her contract is automatically cancelled.

—Spokane, Wash. The board has adopted three rules to govern school clubs. They read: "All high school clubs must hold their meetings either Friday or Saturday nights.

"No student may be a member of more than two clubs having social features in their programs.

"Any student forfeits his or her membership in the clubs for the following quarter if he fails in two or more subjects."

—Rockford, Ill., has an appointive board of education. The Morning Star of that city reports that by three recent appointments, the Mayor claims to have control of the board.

—Five leading bankers of Chicago were offered appointment on the school board by Mayor Thompson, and each declined on account of pressure of private interests.

—A queer situation has arisen in Caddo, Louisiana. Six citizens were elected to the school board but cannot be seated because the governor refuses to sign their commissions. A legal question whether they were elected under the old or the new constitution will have to be determined by the courts.

—Thomas E. Mitten, president of the Philadelphia Rapid Transit Company has been chosen a member of the Philadelphia board of education to succeed the late John Wanamaker. Mr. Mitten is a man of affairs who does not hesitate to take valuable time from important business enterprises to devote to the school interests of his home city.

—The board of education of New York City considered the proposition of allowing publishers to insert advertising in textbooks. Associate Superintendent Shimer reported on the subject as follows: "The application from the

Educational Advertising Company asking that the Board of Education allow publishers of school books to insert advertisements of postum, jello, Beechnut peanut butter, etc., with the view thus to reduce the contract price of books, has been carefully considered in the light of all the arguments pro and con in the appended correspondence. The undersigned is of the opinion that it would be unwise to approve the insertion of mercantile advertisements in our textbooks." The board voted to deny the application.

—The Cook County board at Chicago voted the sum of \$165,000 to continue the probe into the Chicago board of education scandals.

—District No. 10 Town of Parish, Oswego County, N. Y., has one teacher and one pupil. The pupil is seven years old. The teacher gets \$80 a month.

—The attorney of the Chicago board of education, William A. Bither, was found guilty of fraud in handling school real estate transactions and was sentenced to five years imprisonment and a \$2,000 fine.

—The New York City board of education has inaugurated a sweeping investigation of the school system with a view of establishing its physical and financial needs for the present year. The sum of \$50,000 will be expended in ascertaining the true status and determining upon actual needs.

—Dr. William L. Ettinger, superintendent of the New York schools and Mayor Hylan of that city have had a verbal set to. The mayor said that "the superintendent's building program was the cheapest kind of bunk! The superintendent says the mayor's remarks are "Stuff and balderdash."

The state school survey for Indiana recommends: "The creation of a state board of education composed of interested citizens not actively engaged in school work who will bring to the administration of the public schools the point of view of the people, to be appointed preferably by the Governor, to supercede the present board, which is topheavy with ex-officio members, who hold their places because they happen to be at the head of particular institutions and city school systems."

—A school lunchroom has been opened in the Lexington High School, at Lexington, Mass. The lunchroom serves 250 pupils a day under the present arrangement and is supervised by Miss Florence C. Huntress, instructor in household arts. The dismissal hour has been changed from 1:00 to 1:30 P. M., making an additional period and a more useful recess and lunch period.

A new seventh period in the Lexington High School will take the place of the so-called afternoon sessions, formerly held on Mondays and Thursdays from 2:30 to 4:30 P. M. During this period, students who have deficiencies to make up are required to do so. Club meetings and other student activities occur during the seventh period, especially on Friday. Students whose work is satisfactory, and who have no club appointments, are dismissed at 12:50 unless they desire to remain for study.

—Columbia City, Ind. During the past summer, the parent-teachers' association was instrumental in placing \$1,200 worth of apparatus and equipment on the playground of the west ward building.

—An experiment to improve the rate and quality of reading in the schools of Stillwater, Minn., has been carried on in one of the sixth grade rooms. The instructions as to method were issued from the superintendent's office. The Monroe test was given at the end of twenty school days and again at the end of the thirtieth day. The results indicated that the sixth grade of the Nelson School did better than ninth grade students in reading. The experiment will be continued as a means of gaining further information as to the capabilities of the pupils.

—Supt. E. U. Graff of Indianapolis has ruled that commercial advertisements in high school textbooks come under the same ban as advertisements in grade books. The business director has been ordered to notify publishers that the use of books containing commercial advertisements will not be permitted in the schools. The action followed the finding of advertisements in books used by the art department.

—Nashville, Tenn. The twelve-months' school plan recently approved by the school board has been held in abeyance because of a lack of funds to carry out the plan this year. It is planned to take up the matter early in the spring.

—The school board of Camden, N. J., has issued blank forms in the high school upon which pupils have been asked to indicate whether



W. W. LEWTON,
Cicero, Ill.,
Chairman-Elect, Illinois Educational Commission.
(See Page 84)

they are members of a sorority or fraternity. The action threatens to cause a rebellion among the students and to renew a controversy of two years ago when a ban was placed on such organizations.

—Members of fraternities and other organizations unauthorized by the high school faculty of Shortridge High School, Indianapolis, are barred from active participation in class activities. The ruling, which was made by the principal, makes all fraternity members ineligible to any class office, or to the captaincy of any athletic team. Pupils must make signed statements that they are not members of such organizations before they announce themselves as candidates for class positions.

—New York, N. Y. The school board has asked the State Commissioner of Education to use its influence in the passage of a law which shall make fraternities and sororities in high schools illegal. The resolution was introduced by Mr. Harry B. Chambers, as chairman of the law committee of the board, and was supported by the several high school principals who objected to the pernicious influences set up by these organizations.

A display of books from the Library of the Bureau of Educational Research was held at the Educational Conference conducted recently at the Ohio State University. The University proposes to make the library of greater practical use to the school people of the state, by introducing a new department in the Educational Research Bulletin to be called "Recent Accessions to the Library of the Bureau of Educational Research." In this department it is proposed to list all textbooks and books of professional interest received during the interim between successive issues of the Bulletin.

To increase still further the usefulness of the Textbook and Professional Libraries to individual superintendents, principals and teachers of the state, the University is prepared to loan books for examination. Upon request of any superintendent, principal or teacher in Ohio, copies of books will be loaned for periods not longer than two weeks.

WHO RUNS THE SCHOOLS?

Few taxpayers even know what fraction of their own contribution to the local treasury goes for educational purposes. The financial reports of the town or city do not set forth the information in convenient form.

As a matter of fact there is a wide discrepancy in the sums paid out by different communities for schools. But it does not always follow that the more liberal expenditure provides the better school system. The citizen should ask himself, not "Are we spending too much?" for that is not likely to happen—but "Are we getting full value for what we spend?"

If not, why not? Well, the reason probably is that you have put a \$10,000,000 business in charge of a \$3,000 superintendent and then have made him virtually "errand boy" to a committee of five or seven persons, the majority of whom know little about education except how to interfere with it.—Editor, Traveller, Boston, Mass.

THE ABSENTEE TEACHER.

The Connecticut State Board of Education in its October bulletin discusses the non-resident teacher question as follows:

On the official rating card for Vermont rural schools, one of the factors which count toward securing a "Standard" or "Superior" rating is that the teacher shall spend at least two weeks a month in the community—not merely in the town but in the community where she teaches. That is, the Department of Education in Vermont believes that a teacher's presence outside of school hours is an advantage to the community. There are superintendents who will not engage a teacher, unless she will live in the town where she is to teach.

Admitting that there are towns where it is practically impossible for a teacher to find a place to live, the fact remains that there are hundreds of teachers who might live where they teach and do not. Usually this is due to family reasons. Sometimes a teacher feels that she must give up teaching if she cannot live at home. Yet there is no doubt that there are numberless teachers who are free to go where they will, and who prefer to live in other localities than the towns in which they teach. The towns and the schools which they serve are the losers thereby.

A teacher ought to be a part of the community in which she teaches. She ought to feel that it is her home and that she belongs there. If she lives elsewhere and only goes in to her work in the morning and out again at night, she is in the community, but not of it.

It is urged that a teacher wants "to get away from school." Does she? She needs vacations and she has them—longer than any other worker. She needs to know what is going on in the world, but, if it can be managed, she ought to live where she teaches. If she does not, she loses a great opportunity. She forfeits one of the great privileges which distinguish the professions from the trades—the opportunity for continuous service.

Her pupils ought to know what a teacher looks and acts like outside of school hours. I am not suggesting that she must be a model and appear at social functions with an air of conscious virtue and a determination to set a good example. I am suggesting merely that the presence of an educated man or woman who can and will take part in civic and social life is an advantage which the community employing a teacher ought to have and which it should not relinquish without a struggle.

SCHOOL BOARDS ORGANIZE IN OHIO.

Steps have been taken to bring 2,500 boards of education in Ohio into one immense educational organization, according to "School Topics," the official publication of the Cleveland Schools.

The nucleus of the organization is the Ohio State Association of School Boards, formed at Columbus last April, when members of school boards and educators from all parts of the state met to discuss educational problems. At this same meeting, a program, embracing the entire State, and calling for better financing of public schools, strengthening weak districts, and providing for changes in the building code was formulated, and steps taken to put it into immediate operation.

TAKE SCHOOL BOARD INTO CONFIDENCE.

The High School Visitor issued semi-occasionally by the University of Illinois, addresses itself in a special article to those having high schools in charge. In urging the value of team work it says:

"A most important factor in your team work is keeping the board informed as to the plans, progress, and needs of the school. Many of the disastrous closings of the school year are due to the utter failure of the principal in this respect. Most school boards are well meaning and desirous of having a good school, the best that the means at their command will permit. They are busy men of affairs, yet often sense keenly the public trust that the people have placed in their hands.

Wise, indeed, is that principal who so presents the plans and problems of the school as to win the confidence and hearty support of his board in every forward movement. Most people are skeptical if not suspicious about things they do not understand. Take your board freely and fully into your confidence as to the organization of your school, the needed equipment, and the general character of the work the teachers are doing. It is the surest way to success.



An Old Hand's Advice

An old plumber named Ker-rigan once told me that he had advised his son, on taking over the business, always to use Clow Plumbing.

"It saves time on the job," he said. "And time is money."

Take the porcelain urinals, illustrated above. In the first place, after a rigid inspection for flaws, they are matched as to height and color.

They then go to the assembly floor, where, armed with the architect's blue prints, skilled workmen set them up.

The seam covers do not quite fit. But with an air chipping chisel, they are made to fit. When set up on the job there will be no unsightly gaps to be plastered up.

All the fittings and trimmings are assembled. The whole thing is then taken down and shipped, with all parts marked, to the plumber who is to install it.

The old man was right. Clow plumbing *does* save time on the job!

W. B. Clow, Jr.

JAMES B. CLOW & SONS

General Offices: 534-546 S. Franklin Street, Chicago

Sales offices in the principal cities



BERLOY STEEL LOCKERS



The dismissal bell rings,—pupils hasten to secure their wraps and personal belongings. It is then that a locker receives rough use. Often, the doors are unlocked and swung clear back. Unless well built this results in a strain on hinges and uprights.

On Berloy Steel Wardrobe Lockers no matter how often the doors are swung clear back, no harm results. Mounted on two inch wrought steel hinges with concealed attachments, the doors open the entire distance of 170° without any strain on hinges or uprights. Freedom from constant repairs is insured.

The many other noteworthy features of Berloy Steel Wardrobe Lockers together with installation views are shown in catalogue Y-7. Have you a copy?

THE BERGER MFG. CO., CANTON, OHIO

Boston
Chicago
Minneapolis
Dallas

New York
St. Louis
San Francisco
Roanoke

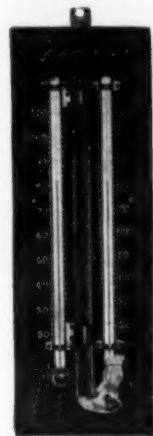
Philadelphia
Kansas City
Los Angeles
Jacksonville

Doors that open wide

Why should the temperature in the schoolroom be kept at 68°?

The human body burns up energy or stores reserve heat units, as the temperature varies. At 68° Fahrenheit the normal system functions more efficiently than at any other point. Above or below this mark, either drowsiness from excess bodily fuel or discomfort and chill from too great a drain on the reserves impair one's ability to teach or assimilate learning. Thus it is seen that an accurate thermometer is vital to the efficiency of your school.

WILDER-PIKE Thermometers, the standard for years, are accurate instruments for gauging heat. Teachers must *know* the temperature in their rooms and they *can* know with—



Hygrometer

Gives the correct temperature and moisture.

WILDER

ACCURATE
THERMOMETERS
AND HYGROMETERS



No. 1582

The standard style for classrooms where efficiency and health are the watchwords.



No. 974

For cooking classes to eliminate guesswork and help teach the art by accuracy.

WILDER-PIKE THERMOMETER CO.
TROY, N. Y.



Hamilton Street School, Harrison, N. J.
Jos. W. Baker, Architect.

Conservation of fuel is the most important work of the American people. The problem of fuel saving is solved by the Board of Education of Harrison, N. J., by the use of the Peerless Unit System of Heating and Ventilating in the Hamilton Street School, Harrison, N. J.

Pure air and proper temperature conditions are prime essentials to student health and efficiency. The Peerless Unit System of Ventilating and Heating stands clearly alone as the means of meeting these requirements. The volume, temperature and condition of the pure, fresh air, cleansed of dust and healthfully humidified, positively supplied to each room, is made exactly right for that room independent of every other room and distributed thoroughly throughout the room without drafts.

Our Engineering force is at your service.

Peerless Unit Ventilation Co., Inc.
437-439 West 16th Street, New York, N. Y.

DURAND STEEL LOCKERS—

DURAND Steel Lockers look simple in construction, and they are. It has taken many years, many plans, and much special machinery to make them simple.

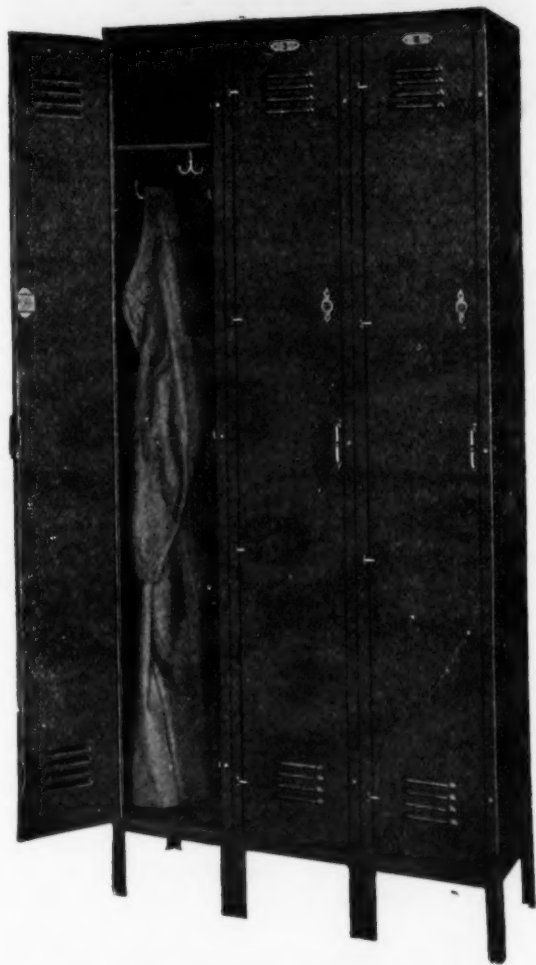
This simplicity gives them better appearance; greater cleanliness; stronger construction, and many more years of service.

There is a finality about Durand design that makes Durand Lockers "standard."

*Send for catalogs on lockers or shelving.
Send us your specifications for prices.*

DURAND STEEL LOCKER COMPANY

1521 Ft. Dearborn Bank Bldg., Chicago
37th Street and 11th Avenue, New York City
1521 General Motors Bldg., Detroit
2421 First National Bank Bldg., Pittsburgh



SCHOOL ADMINISTRATION NOTES

NEW YORK'S SCHOOL ADMINISTRATION PROGRAM.

With the election of Alfred E. Smith as governor of New York state, the educators feel that a progressive school administrative program may be presented to the legislature with a reasonable assurance of success. This implies better support for the state department of education and for rural schools.

The program as now formulated also provides for a change in the size of the New York City Board of Education.

The board would still be appointed by the mayor, but the membership would be increased from 7 to 17. This number, however, may be reduced by referendum election.

Such an election must be held if two-thirds of the members of the Board of Education so decide or if two per cent of the voters in a school district petition for it.

The questions that are to be voted upon are:

1. Shall the members of the Board of Education be paid for their services?
2. Shall the members of the Board of Education be appointed?
3. Shall the members of the Board of Education be elected?
4. Shall the members of the Board of Education be elected at a school election?
5. Shall the members of the Board of Education be elected at a general election?
6. Shall the members of the Board of Education consist of three members, five members, seven members, nine members, eleven members, thirteen members, fifteen members, seventeen members?

A referendum upon the same questions shall not be held again until five years thereafter un-

less upon unanimous vote of the Board of Education or petition of five per cent of the voters.

Intelligence Test on a Huge Scale.

The largest undertaking in the field of intelligence tests has been inaugurated by the state of New Jersey whereby approximately 50,000 fifth grade children will come under consideration.

The test will be carried out upon a comprehensive scale and involves the cooperation of many educators in the state. These, some thirty in number, are formed into a general committee and are headed by Roy L. Shaffer, the assistant state commissioner of education. The general committee is divided in sub-committees on field of work, administration, statistics, advisory and consulting.

An examiner's guide has been prepared by John Enright, the state commissioner of education. This guide provides general instructions and directions of a series of thirteen tests. Some of these are accompanied by test questions and numerous untitled illustrations.

The record blanks were worked out with great care and will, when filled out, readily enable deductions and conclusions.

Commissioner Enright, in presenting the subject, says:

"The study of the individual should be of great concern to every educator. The widespread tendency to use the various achievement and intelligence tests to determine the best classification of each pupil has led to the appointment of a committee of schoolmen to cooperate with the department in the solution of the problem."

SCHOOL ADMINISTRATION.

—At Philadelphia the school principals recently gave a dinner in honor of the board of education, but excluded the six colored men and women principals from the affair. "Such actions are calculated" says the Philadelphia Ledger "to perpetuate racial misunderstandings and breed just resentment."

—Dr. John Wesley Carr was appointed president of the Murray Normal School of Kentucky. He is an old Indiana school man who also for several years served as superintendent of the high schools of Kentucky.

—At Newton, Mass., a school association is fostering the eight-week system, based upon eight weeks of school to be followed by a week's vacation. The parents are to be sounded on the question.

—"Teachers of commercial subjects" declared Dr. John L. Tildsley, district superintendent of New York City recently, "do not measure up as far as qualifications are concerned, to the teaching task before them."

—Since the opening of the schools in September, the board of education of New York City has succeeded in taking 3,683 pupils in high and elementary schools off part time. According to the figures compiled, there were 149,727 children on part time in October, as compared with 153,410 in September. The greatest relief was provided in the elementary schools, the total for which was reduced from 94,640 to 91,081, a reduction of 3,559. Comparatively little headway was made in the high schools, which showed an October total of 58,646, as against 58,770 in September, only 124 less. Both the elementary and high schools reported large increases in part time over October, 1921. In the high schools the increase was 24,754, and in the elementary schools it was 9,839.

While the ratio of part-time pupils to whole-time pupils in elementary schools was only about one to eight, the situation in these schools was complicated somewhat by 200,768 pupils in double and triplicate sessions, a gain of 6,534 over the preceding year. The high schools also had more students on double session than a year ago, the total being 6,741, an increase of 5,225.

The total day school registration for all boroughs was 933,233, which was 27,022 more than in October, 1921, and a daily attendance of 861,319, a gain of 196,518.

—Education Week was observed in the schools of Dunbar Township, Dawson, Pa., in a way that has contributed to the lasting benefit of the schools. The observance of the week was the most successful of any movement inaugurated in the township because each and every one cooperated wholeheartedly in making the event a great success for the district. In every

COLLEGIATE AND TECHNICAL SCHOOL

*Another
Dunham
Success*



*Sarnia
Ont.
Canada*

DUNHAM VACUUM SYSTEM OF HEATING
APPROXIMATELY 180 RADIATOR TRAPS

Architects—S. B. Conn & Son.
Consulting Engineer—M. F. Thomas.
General Contractors—P. H. Secord & Sons Construction Co., Ltd.
Heating Contractor—John Filsinger (succeeded by A. R. Calcott & Co.)

The formal inauguration of this three quarter of a million dollars educational institution in October, 1922, was a notable occasion in Sarnia and indeed in the educational history of Canada, for in this Dunhamized institution there are educational facilities that are unsurpassed in any city of similar size in the Dominion, and equalled by few.

THE DUNHAM
HEATING SERVICE

C. A. DUNHAM CO.
230 East Ohio Street Chicago

school local officials, clergymen and educators gave talks to the students and considerable enthusiasm was aroused.

—Buffalo, N. Y. Foreign-born children in Public School 12 are taught English for half of every school day, spending the other half in their regular school rooms. Many children have done the work of several grades in European schools, but on account of their lack of English, are assigned to a low grade with children younger than themselves. To help these children in learning English and enable them to take their places with children of their own ages, the school has established a special class. Promotions are made every two weeks and this acts as an incentive to hard work. As a result of the work it is found that many children speak better English after six weeks than some who have been in the regular grades for two years.

—It is charged by Mrs. Seymour Cromwell, a member of the school board at Mendham, N. J., that the state federation of district boards of education is autocratic in its methods, is spreading misstatements in legislative propaganda and fails to act upon the sentiments of more than four hundred local boards.

—A. M. Shelton, chairman of the Illinois Educational Commission charges that a social caste has grown up between high school and grade school teachers. He alleges that the former scorn professional suggestions made by their sisters in the lower grades.

—The Teachers Council of New York City went on record as favoring a five and one-half hour day for high school teachers.

—Commissioner John J. Tigert of the United States Bureau of Education, in his recent annual report, calls attention to the principal problems now facing the country in an educational way. Assimilation of the foreign born, removal of illiteracy, adjustment of inequalities in educational opportunity, and the inculcation of proper ideas concerning the American form of government, are considered as paramount problems which the educational forces of the country must meet.

Mr. Tigert holds that informed leadership is needed in dealing with these problems. While some of the states due to long experience and

consecutive efforts of their leaders have accomplished notable achievements, other states still seek the answers to many of the same questions.

Increased support for the bureau of education, as a conservative investment, was urged by Mr. Tigert, in the light of the services rendered by the bureau to the whole population. He pointed out that the staff is limited through lack of means, and that it is impossible for the specialists to give full attention to more than a small part of the problems that press for solution.

Superintendent Condon of Cincinnati, O., in his periodical communication to the schools says: "My attention has just been called to the commercial advertisements carried in one of the school books. We are absolutely opposed to any commercial advertising through the schools, no matter what form it may take. Please look over all your books and report to me what books and how many copies you have which carry any form of advertising other than the name of the publisher of the text, which, of course, is a perfectly legitimate imprint. Keep me informed also in the future whenever any other texts are sent to you which carry advertising matter, for we are to guard as carefully against this as any other form of distributing advertising matter through the schools."

—The State Journal of Frankfort, Ky., recently devoted a full page to a description of the educational facilities to be found in Frankfort and Franklin County. The article reviewed the standing, faculty, growth and achievements of the local high school and reproduced statements by leading citizens on the achievements of the schools during the past two or three years. The president of the local Chamber of Commerce body in a brief statement, commented on the fact that the city may well be proud of what has been accomplished in recent years, and pointed to the fact that the improvement of educational facilities is one of the important planks in the working program of the Commerce body. Supt. J. W. Ireland of the Frankfort school system contributed an item to the school page.

—New York, N. Y. The Alumni Commerce Club, an organization of high school graduates,

has opposed the existence of fraternities in secondary schools. Resolutions advocating the adoption of legislation barring such organizations from the schools adopted by the club, have been forwarded to the chairman of the law committee of the board of education and to the State Commissioner of Education.

—A movement has been begun at Kenosha, Wis., to reduce the board of education from a membership of eighteen to seven. An election has been called, and it is interesting to note that former members of the large board are giving active support to the change.

—A new accounting system has been developed by the board of education at Kenosha, Wis. The new system is especially strong in bringing out costs of individual schools and subjects and applies to an educational situation the best principles of industrial cost accounting.

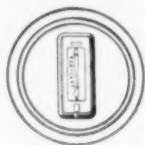
—The Supreme Court of Massachusetts has ruled that the Waltham school board is not abolished by the change to the Plan B form of government. At the municipal election in December, only two members were elected, thus sustaining four members of the board who contended they should serve out their terms which do not expire until 1924.

—A teachers council has been formed at Philadelphia. This body will from time to time make recommendations on school matters to the board of education.

—Dr. George F. Zook, chief of the division of higher education of the United States Bureau of Education is making a survey of the Massachusetts higher and technical institutions of learning.

—At the recent meeting of the State Teachers' Association held at Boise, Idaho, a state research association was organized. The problems to be studied during the coming year are as follows: (1) "The educational and mental status of the fifth grade pupil," (2) "The age-grade and years in school status of the elementary school pupil," (3) "The devising and standardizing of an individual uniform cumulative record card," (4) "The experimental determination of the efficiency of methods of teaching spelling."

The "Sylphon" metal bellows which is the metal diaphragm in use in Johnson valves is seamless and will not wear out.



The Johnson Pneumatic System of Temperature Regulation has imitators. The devices only, however, are imitated. That composite something constituting Johnson *Service* is not. It cannot be. Yet, after all, there is where Johnson Service Company's advantage to temperature control users really commences. Therein are qualities stronger than patented, deeper than copyrighted: beyond the imitator's eye to perceive or his mind to conceive or his ability to imitate. The Johnson Pneumatic System of Temperature Regulation remains ahead of them all because Johnson *Service* Company is behind it all.



What shall we say of a system whose valves are guaranteed for ten years: simply that it is purchased in certainty instead of uncertainty, and that its long and honorable reputation is backed by a specific warranty of superior excellence and service



Rundle-Spence Vertico-Slant Drinking Fountains

The patented design and construction of the RUNDLE-SPENCE "Vertico-Slant" Drinking Fountains absolutely eliminates all possibility of contamination. They are positively germ proof, durable in construction, plus economical in cost.

RUNDLE-SPENCE "Vertico-Slant" Drinking Fountains have no hoods on which the corners of the mouth can rest, no filth collecting crevices that are impossible to clean. The bowls are of extra heavy vitreous china, of free open construction, and are principally and essentially sanitary in every respect.

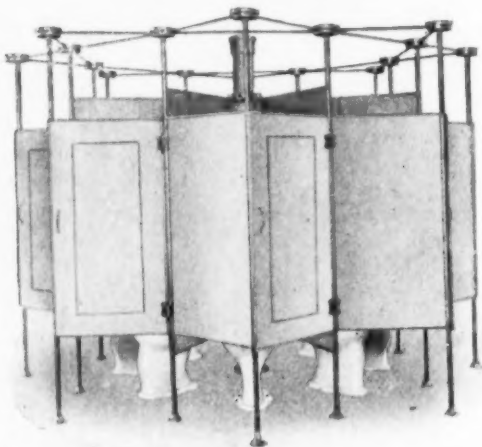
Write for illustrated catalog giving complete details and description.

Rundle-Spence Mfg. Co.

63 FOURTH STREET MILWAUKEE, WISCONSIN



The Kelly Octopus Water Closet Combination For Schools



8 Water Closets in small space.
Stands out free from Walls.
Does not intercept Light or Air.
Can be installed in Half the Space, in Half the Time,
and at Half the Cost of others.
The large Octopus One Piece Drainage Fitting, not
shown, is included with each Combination.
Hundreds in use.

Details on request.

THOS. KELLY AND BROS.
404 SOUTH KOLMAR AVE.
CHICAGO, ILLINOIS.



*"With the number of schools far below the need,—
those we have must be made doubly efficient."*

Good Ventilation Is Vital To Comfort, Health and Efficiency

Teachers cannot put forth their best efforts nor can scholars be 100% attentive or assimilative when the schoolroom is stuffy, close or damp. Fresh air through good ventilation will increase efficiency and insure health and comfort during these winter months when windows are kept shut.

be sure **"GLOBE"** *be safe*
VENTILATORS

Snow and rain cannot leak through nor clog a GLOBE Ventilator and down draughts are impossible. By taking advantage of the laws of air in motion, these remarkable ventilators have a greater exhaust capacity—insuring fresh air under all weather conditions. Made of heavy gauge Keystone copper bearing galvanized steel without loose parts to rattle or get out of order—GLOBE Ventilators will last as long as the building itself.

*Write for catalog and list of prominent schools where
GLOBE Ventilators keep children up to par.*

Dept. J. **GLOBE VENTILATOR CO.** Troy, N. Y.



Whether it's a compression or mixing valve type all Speakman Institutional Showers are designed to operate efficiently at the economy point—6 gallons of water per minute. Any information that we may have bearing upon particular installations or problems will be gladly given to school boards interested in showers. Also if you wish we will send our shower catalog—H.

Speakman Company

Wilmington

Delaware

SPEAKMAN SHOWERS

A STUDY IN HIGH SCHOOL GRADES AT PALMYRA, N. Y.

The school grades for the high school of Palmyra, N. Y., for the first ten weeks of the school year show a marked increase in efficiency over the corresponding period of last year. The system of supervised study now in force in the school has been given the credit for a large part of this efficiency. The system was installed last fall by Principal S. Clayton Sumner, who first used the plan in 1915 while he was filling a superintendency in another New York community.

The study reveals that only 61 students failed in one or more subjects this year, as against 81 last year, while on the other hand 67 students had an honor or average of 90 per cent in one or more subjects during the quarter. In other words, more students received honors this year than dishonors. Out of 646 pupil-subjects, there were 108 failures, as compared with 151 a year ago out of 627 pupil-subjects, or a gain of 25 per cent of failures to 17 per cent.

It is also brought out that 125, or twenty per cent of the marks were above 90 per cent.

What Kansas Thinks About Consolidation.

The United States Bureau of Education has just published the results of an inquiry on school consolidation in Kansas. It received 63 replies representing 38 consolidated districts out of a total of 89 consolidations in the state.

The answers to the question whether consolidation had proven a success were all in the affirmative with the exception of three. Of these three rather unfavorable replies, one stated consolidation was not entirely successful because of too long transportation routes, necessitating a ride of three or four hours for some of the children; another, because the school board would not employ the best teachers, the school lacked good organization, and transportation facilities were poor; the third reply is to the effect that owing to the shape and size of the district too long transportation routes, involving too great expenditures, were necessary.

The advantages of consolidation were summarized as follows: Better building and equipment, with a janitor to care for the building; better equipment; less tardiness; better attend-

ance; longer term of school; more efficient training; high school privileges; same opportunities as town children; better teachers; sufficient number of teachers; better grouping of children; better chance of training foreign children; better playgrounds; more opportunity for athletics; less sickness, owing to better watchfulness of the teachers, more healthful conditions of the schoolroom, and transportation of pupils without exposure; better school spirit; better cooperation of teachers, pupils, and school board, working together for the benefit of the community; better community spirit; friendlier spirit created between town and country children; benefit of transportation, especially in stormy weather; children arrive home more quickly on the bus than before; better roads.

Per Capita School Debt of Western Cities.

In carrying a bond issue of \$6,150,000 the school authorities of Denver, Colo., presented the following table of figures showing the per capita school debt of western cities contracted to build schools:

City	Per Capita Debt
Los Angeles	\$55.49
Des Moines	47.44
Colorado Springs	46.57
Omaha	45.14
Lincoln	41.64
Oklahoma City	40.71
Kansas City, Mo.	36.99
Minneapolis	35.48
Salt Lake City	31.81
Kansas City, Kans.	31.73
Dallas	30.29
Oakland	26.68
El Paso	25.79
San Antonio	22.04
Seattle	21.63
Spokane	20.03
Sioux City	19.73
Davenport	18.03
San Diego	17.07
Milwaukee	14.14
San Francisco	13.96
Fort Worth	11.96
Denver	9.16
St. Louis	3.88

The low per capita debt of St. Louis may be a surprise to those who have seen the excellent

school buildings of that city. It is explained by the fact that for many years St. Louis has had a "pay-as-you-go" building policy. Their annual school tax levy has been sufficient to provide for buildings as they were needed. This would be a desirable method for Denver. However, it would require a prohibitive tax levy now to enable Denver to catch up.

PER CAPITA SCHOOL DEBT.

The per capita school debt of New Jersey is presented by the department of instruction as follows:—

District	Total School Debt	Population	Debt Per Capita
Bridgeton	\$ 14,344.53	14,323	\$ 1.00
Bordentown	6,800.00	4,371	1.56
Gloucester City	88,153.04	12,162	7.25
Phillipsburg	130,301.82	16,923	7.70
Millville	126,657.78	14,691	8.62
Salem	80,000.00	7,435	10.76
Long Branch	162,151.34	13,521	11.99
West Hoboken	485,500.01	40,074	12.12
Passaic	816,963.34	63,841	12.80
Trenton	1,341,907.99	119,289	12.93
Ocean City	35,961.68	2,512	14.32
Perth Amboy	625,364.22	41,707	14.99
South Amboy	133,060.00	7,897	16.84
Pleasantville	104,295.53	5,887	17.72
Orange	632,013.26	33,268	19.00
Camden	2,338,489.67	116,309	20.11
Bloomfield	469,356.00	32,019	21.32
Woodbury	137,061.69	5,801	23.63
Paterson	3,353,230.55	135,875	24.68
Irvington	632,753.87	25,480	24.83
Newark	10,343,418.05	414,524	24.95
Jersey City	7,734,507.09	298,103	25.95
Elizabeth	2,521,969.28	95,783	26.33
Asbury Park	328,158.91	12,400	26.46
Burlington	258,518.85	9,049	28.57
Bayonne	2,274,613.72	76,754	29.64
Town of Union	617,673.32	20,651	29.91
Rahway	339,282.83	11,042	30.73
Cape May City	93,200.00	2,999	31.08
East Orange	1,671,596.23	50,710	32.96
North Bergen	818,588.12	23,344	35.07
Clifton	937,435.05	26,470	35.42
New Brunswick	1,222,390.81	32,779	37.29
Englewood	436,096.86	11,627	37.51
Kearny	1,031,818.18	26,724	38.61
Atlantic City	2,145,342.82	50,707	42.31
Hoboken	3,548,038.39	68,166	52.05
Montclair	1,841,089.70	28,810	63.90
Ventnor City	157,211.05	2,193	71.69
Summit	760,426.70	10,174	74.74

—The school population of Pullman, Wash., has increased thirty per cent during the past three years, which has prompted the school board to contemplate a new high school building to be constructed within the next three years.

Department of Superintendence Meeting

The Department of Superintendence of the National Education Association will hold its next annual meeting February 24 to March 2, at Cleveland, O. The Central Passenger Association has announced round-trip tickets on the identification certificate plan, at one and one-half fare for the round trip, to members of the Association and their families. Tickets will be good via the same route in both directions and will be sold beginning February 21st. When validated, tickets will be good for return any day within the final limit, but passengers must arrive at their destination not later than midnight of March 8th. Railroads in the Far West will sell tickets from February 17 to 23, with return limit on March 10.

The headquarters of the Association will be in the Cleveland Public Auditorium, which will also be the clearing house for various social functions and general activities of the convention.

President J. H. Beveridge of the Department has announced the following program for the meeting:

Monday, February 26.

Greeting, Supt. R. G. Jones, Cleveland, O.

Some Observations, Hon. J. J. Tigert, United States Commissioner of Education, Washington, D. C.

What Constitutes American Citizenship, Mr. Alvin Owsley, National Commander, American Legion, Indianapolis, Ind.

Leisure Time, Henry Turner Bailey, Cleveland, O.

Health and the Schools, Mr. George E. Vincent, President, Rockefeller Foundation, New York, N. Y.

Business Session—Future policy of the Department. Report of the Committee on the Status of the Superintendent.

Seven-minute Talks: My Experience in Administering Education, Supt. Frank Cody, Detroit, Mich.; Supt. Theodore Saam, Council Bluffs, Ia.; Supt. R. J. Condon, Cincinnati, O.; Supt. F. H. Bair, Colorado Springs, Colo.; Supt. Peter A. Mortenson, Chicago, Ill.; Supt. Thomas R. Cole, Seattle, Wash., and Supt. E. C. Hartwell, Buffalo, N. Y.

General Problems in Education and Citizenship: Mr. Wm. B. Owen, Chicago, Ill., and Marion L. Burton, Ann Arbor, Mich.

Tuesday, February 27.

The Cost and the Fiscal Administration of Schools, George D. Strayer, Teachers College, Columbia University, New York, N. Y.

The Tax Problem in Relation to the Financing of Public Education, Mr. Robert M. Haig, Columbia University, New York, N. Y.

What the Schools Do in Relation to What They Cost, Mr. H. B. Bruner, Superintendent of Schools, Okmulgee, Okla., and Mr. Herbert S. Weet, Superintendent of Schools, Rochester, N. Y.

Symposium: Budget Making and Spending, Mr. Arthur B. Moehlman, Detroit, Mich., Mr. A. F. Harman, Montgomery County, Ala., and Thomas E. Finegan, Harrisburg, Pa.

Joint Session of the Department with the affiliated departments of elementary education, secondary education, and rural education. Speakers, Olive Jones, School No. 120, New

York City; Mr. H. E. Winner, South Hills High School, Pittsburgh, Pa.; Charles H. Lake, First Assistant Superintendent, Cleveland, O., and Mr. Aaron Sapiro, Attorney, New York, N. Y.

Wednesday, February 28.

The Curriculum: Principles and Types of Curricular Development, Mr. Otis Caldwell, Lincoln School, New York, N. Y.

Keeping the Curriculum Alive, Amalia Bengston, County Superintendent, Olivia, Minn.

By Whom and How Made, Mr. Ernest Horn, University of Iowa, Iowa City.

How Modern Business May Aid in Reconstructing the Curriculum, Mr. Charles H. Judd, University of Chicago, Chicago, Ill.

The Human Element in Curriculum Making, Mr. William McAndrew, Associate Superintendent of Schools, New York, N. Y.

Thursday, March 1.

Round Tables of City Superintendents: Cities of Population up to 10,000, Mr. W. H. Morton, Beatrice, Neb., Chairman; Cities from 10,000 to 30,000 population, Mr. J. W. Gowans, Superintendent of Schools, Hutchinson, Kans.; Cities from 30,000 to 100,000 population, Mr. Carleton B. Gibson, Savannah, Ga., Chairman; Cities from 100,000 to 300,000, Mr. G. N. Child, Salt Lake, Utah, Chairman; Cities from 200,000 to 400,000 population, Mr. Charles S. Meek, Toledo, O., Chairman; Cities over 400,000, Mr. Henry S. West, Baltimore, Md., Chairman.

Reports of Special Committees. Joint Session with the National Association of Secondary School Principals and the Department of Deans of Women.

Twelve Minute Addresses on School Organization: City School System; State School System, Mr. Thomas H. Harris, Baton Rouge, La.; Progress in Education in 1922, Mr. A. E. Winship, Journal of Education, Boston, Mass.; Immigrant Education, Dr. E. A. Steiner, Grinnell, Ia.; Education International, Gregory Mason, The Outlook, New York, N. Y.

Round Tables.

Superintendents of Cities up to 10,000 Population: W. H. Morton, Beatrice, Neb., Chairman.

The Junior High School as an Aid in the Solution of Individual Pupil Adjustment, W. G. Bate, Superintendent of Schools, Richmond, Ind.

The Problem of Supervision from the Standpoint of the Individual Pupils, Wm. E. Stark, Superintendent of Schools, Hackensack, N. J.

Pupil Progress by Individual Methods, A. J. Stoddard, Superintendent of Schools, Bronxville, N. Y.

School Provision for the Exceptional Child, Guy T. Buswell, University of Chicago, Chicago, Ill.

Superintendents of Cities Between 10,000 and 30,000 Population: J. W. Gowans, Hutchinson, Kans., Chairman.

Administrative and Economic Value of the Platoon System in Junior High Schools, Mr. C. J. Tidwell, Superintendent of Schools, Fort Smith, Ark.

Adjusting the Junior High School Building to the Educational Program, Mr. E. E. Lewis, Superintendent of Schools, Rockford, Ill.

The Place and Significance of Extra Curricular Activities in Junior High School, Mr. Will French, Superintendent of Schools, Winfield, Kans.

Broadening and Finding Courses in the Junior High School Program, Mr. H. B. Bruner, Superintendent of Schools, Okmulgee, Okla.

The Guidance Program in Junior High School, Mr. D. C. Porter, Superintendent of Schools, Bridgeton, N. J.

Group Tests in Forecasting School Success in Junior High School, Mr. H. C. Johnson, Superintendent of Schools, San Diego, Calif.

Superintendents of Cities of 30,000 to 100,000 in Population: Mr. Carleton B. Gibson, Savannah, Ga., Chairman.

A Nationalized System of Education, Mr. Samuel P. Capen, Chancellor University of Buffalo, Buffalo, N. Y.

The Spirit of Democracy as Well as the American Constitution Requires that Education Be Left to the States, Mr. M. G. Clark, Superintendent of Schools, Sioux City, Ia.

Higher Teaching Efficiency, Mr. A. L. Suhrie, Dean of the School of Education, Cleveland, O.

The Training and Development of Teachers After Entering the Profession, Daniel J. Kelly, Superintendent of Schools, Binghamton, N. Y.

A Larger Conservation of Educational Opportunities to Youth—The Year Round School, Mr. H. C. Weber, Superintendent of Schools, Nashville, Tenn.

Business Methods Applied to Educational Organization and Administration, Mr. W. W. Borden, Superintendent of Schools, South Bend, Ind.

Superintendents of Cities of 200,000 to 400,000 Population: Charles S. Meek, Superintendent of Schools, Toledo, O., Chairman.

Financing of Secondary Education, Mr. Zenos E. Scott, Superintendent of Schools, Louisville, Ky.

High School Reorganization, Mr. Thomas E. Briggs, Teachers College, Columbia University, New York City; Mr. Frank G. Pickell, Assistant Superintendent of Schools, Cleveland, O.

Superintendents of Cities over 400,000 population: Mr. Henry S. West, Baltimore, Md., Chairman.

Adjustment Classes, Mr. Robert E. Lane, Assistant Superintendent of Schools, Los Angeles, Calif.

The Platoon School, Mr. Charles L. Spain, Deputy Superintendent of Schools, Detroit, Mich.

A Comprehensive Survey and Its Consequences, Mr. George D. Strayer, Teachers College, Columbia University, New York City.

Among the allied organizations which will hold meetings in connection with the Department of Superintendence are the National Council of Education, the Department of Deans of Women, the Department of Elementary Principals, the Department of Rural Education, the Department of Vocational Education, the City Training School Section, the Council of Kindergarten Supervisors and Teachers, the Educational Research Association, the National Association of High School Inspectors and Supervisors, the National Association of Secondary Principals, the National Council of Primary Education, the National Council of State Education Departments, the National Society for the Study of Education, the National Society of College Teachers of Education, the Department of Classroom Teachers, the National Academy of Visual Instruction, the National Conference on Educational Methods, the National Council of Administrative Women in Education, the Secretaries of State Teachers' Associations, the American Association of Teachers' Colleges, American Association of Teachers' Colleges, and the Conference of Business Managers.

Exhibit of School Building Progress.

A new type of exhibit will constitute one of the interesting features of the 1923 convention of the Department of Superintendence. The exhibit will be the contribution of Wm. B. Ittner, architect and school specialist of St. Louis.

The material on present-day schools will be gathered from the numerous cities where Mr. Ittner is employed either as architect or consulting architect.

It will be classified and arranged into attractive groups, and will show the evolution of school building plan based on the evolution of educational procedure and the results of specific studies of safety, lighting, ventilation, sanitation and modern methods of construction. The exhibit will be placed on the second floor of the Cleveland Auditorium.

An Invitation

To the Boards of Education:

The Department of Superintendence of the National Education Association will hold its convention at Cleveland, Ohio, February 25 to March 1, 1923. The Executive Committee of this organization has prepared a valuable program for men and women engaged in educational administration and supervision. This is the most important educational meeting for city, state, and county superintendents that is held annually in the world. The attendance promises to be the largest in the history of the organization.

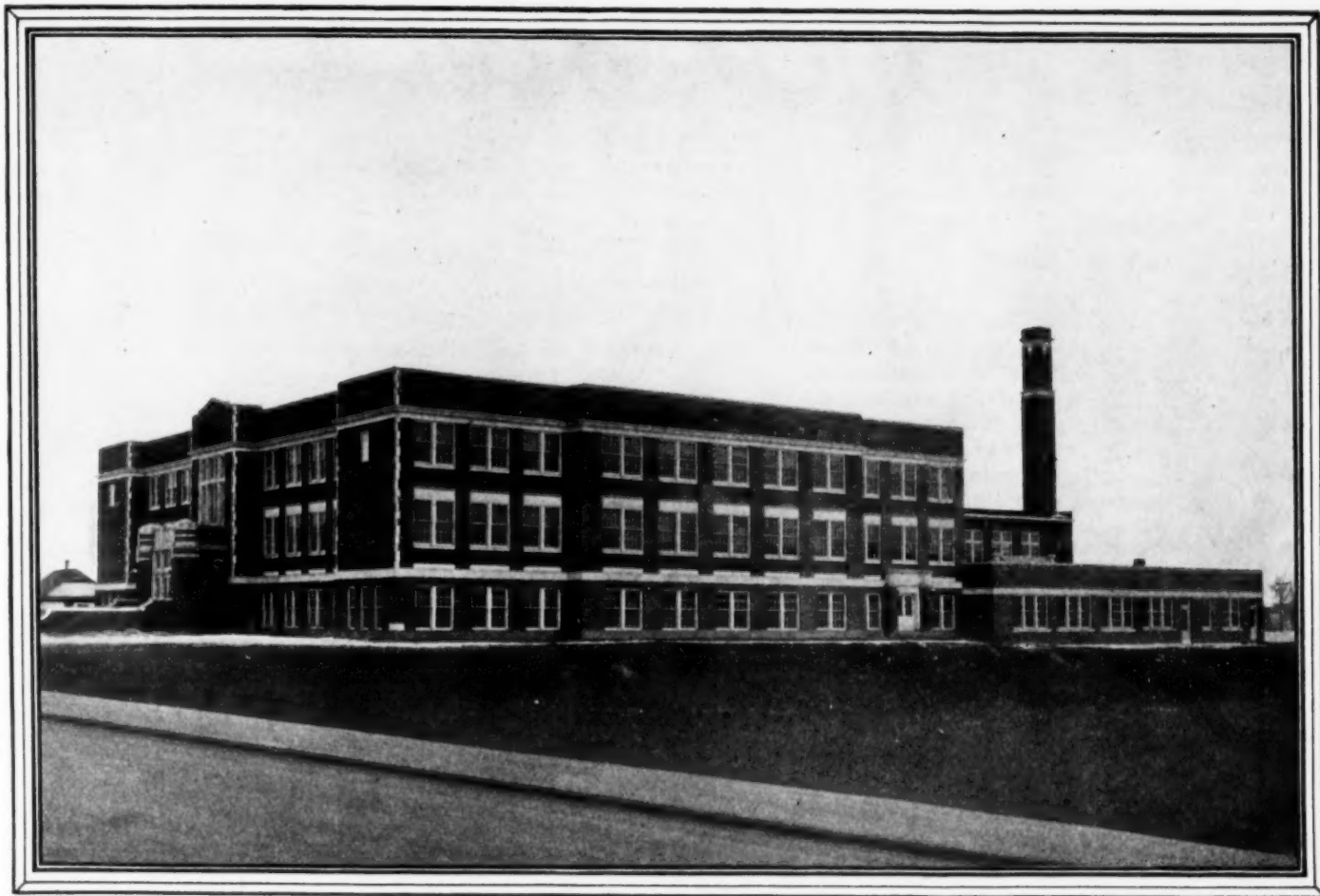
Boards of Education should send their superintendents to this meeting with expenses paid. Any live superintendent will take to his school system from this meeting many times the cost entailed by the board in sending him. It will be to the credit of boards of education to send other executive officers to this meeting.

You cannot afford to have your superintendent absent from this important conference.

JOHN H. BEVERIDGE,

President.

January 6, 1923.



MILES CITY HIGH SCHOOL, MILES CITY, MONTANA. WARREN A. DEDRICK, ARCHITECT. CRANE PLUMBING AND HEATING EQUIPMENT INSTALLED BY F. G. HATCH, HARDIN, MONTANA

CORRECT HEATING AIDS SCHOOLROOM EFFICIENCY

Efficient school work demands correct heating and good ventilation. In individually-controlled, steam-heated radiators, adjustable control is possible with Crane modulating radiator valves which regulate the flow of steam in the same way a sink faucet regulates the flow of water. In air-warming and tempering coils for ventilating systems, Crane

headers and piping give long service with freedom from trouble caused by badly-fitting screwed joints or defective connections. Crane valves and fittings for water, heating and drainage piping systems, as well as Crane sanitation fixtures for every school requirement, are built with careful regard for long life and continuous, efficient service.

CRANE

GENERAL OFFICES: CRANE BUILDING, 836 S. MICHIGAN AVE., CHICAGO

Branches and Sales Offices in One Hundred and Thirty-five Cities

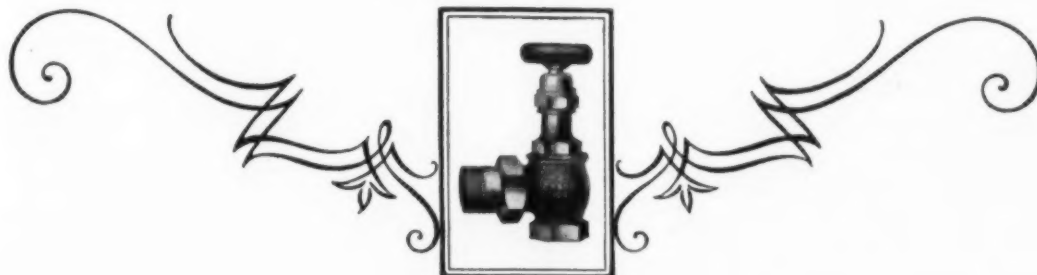
National Exhibit Rooms: Chicago, New York, Atlantic City

Works: Chicago and Bridgeport

CRANE, LIMITED, MONTREAL. CRANE-BENNETT, LTD., LONDON

CRANE EXPORT CORPORATION: NEW YORK, SAN FRANCISCO

CIE CRANE, PARIS



Crane Radiator Valve No. 220



"They Excel"



No. 596 N. Self-closing Sanitary Fountain, has a vitreous china bowl and bubbler. All parts heavy nickel plated. Noteworthy feature is special supply faucet for filling glass or pitchers.

"They excel in every vital characteristic," the remark of an enthusiastic and satisfied user. And "NONGCO" Plumbing Fixtures actually do. There's no question as to their excellence of design, finish, etc.—and their endurance and service qualities are a matter of record. But for your own satisfaction we suggest that you *see* and *compare*—then draw your own conclusions.

Our catalogue is sent free on request.

BRANCHES

Davenport, Ia.
Pueblo, Colo.
Houston, Tex.
Little Rock, Ark.

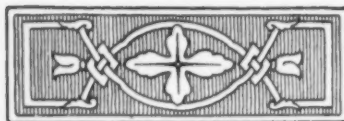
Salt Lake City, Utah.
Birmingham, Ala.
Los Angeles, Calif.
Memphis, Tenn.

Dallas, Tex.

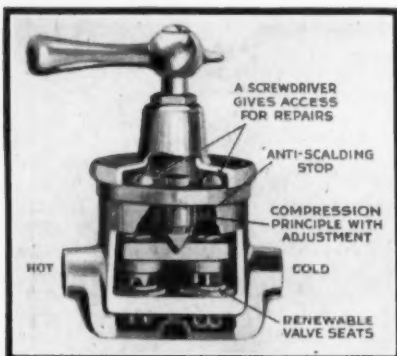
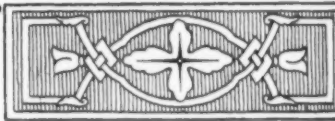
N. O. Nelson Mfg. Co.

Edwardsville,
Illinois

St. Louis,
Missouri



Pioneer Manufacturers of Plumbing Fixtures for Schools



THE SUPPLY CONTROL OF NIEDECKEN SHOWERS



Removing Cover With
Screw Driver



Cover Removed, Giving Access
to Valve Discs



Replacing Valve Seats

NOTE THE SIMPLICITY

The few parts subject to wear are easily replaced even after years of use—
MAKING IT EVERLASTING

The First Cost Is Practically the Last

Write for Bulletin SB15X

HOFFMANN & BILLINGS MFG. CO.
MANUFACTURERS SINCE 1855
MILWAUKEE, U. S. A.

EFFICIENT VENTILATION

Can be obtained only through the use of equipment designed to meet the specific requirements for which it is intended.

Bayley

Plexiform Fans

are made in a variety of capacities from 300 to 300,000 cubic feet per minute. They are designed especially with a view of

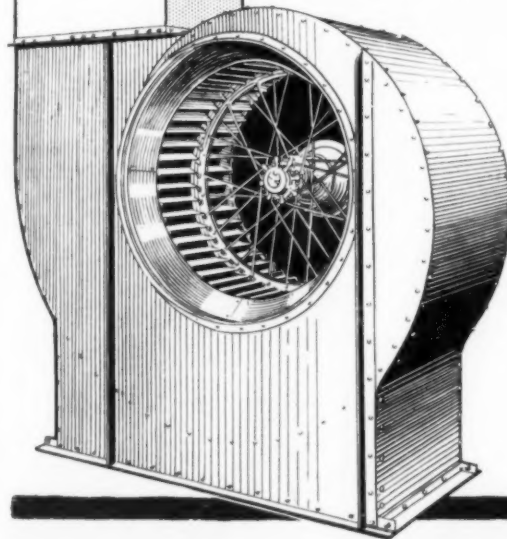
handling a maximum volume of air from a minimum of space and power requirement. Their efficiency as proved by installations in thousands of the largest industrial, public, school, theatre and office buildings, makes them prime favorites with architects, engineers and owners.

Write for Catalog

BAYLEY MFG. CO.

Dept. (H)

Milwaukee, Wis.



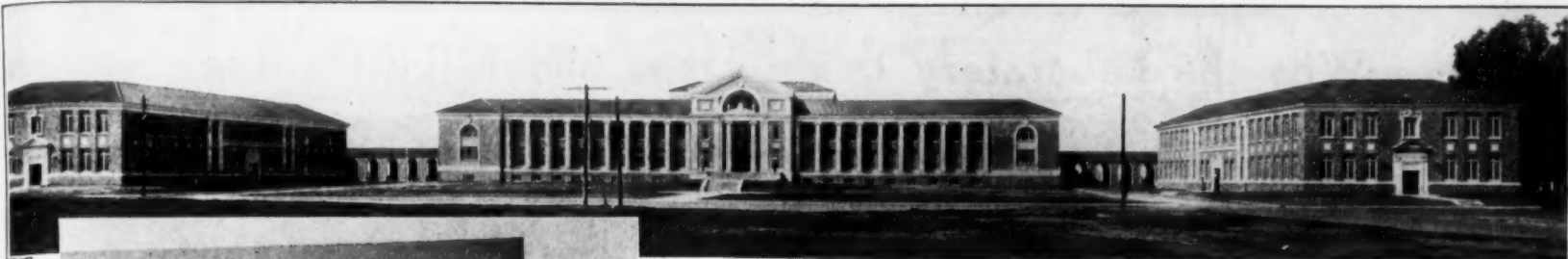
RATING

There and much of Vermont the rural to the ru can be a education The st official n which it schools maintain both in b be filled intenden tive rat and the as possi The fi name of teacher superint scoring, of check taining superior contains ments w rating o STAND

(2) 1.

(4) ' 2.

(4) ' 3.



Fresno High School
Group,
Fresno, Calif.

Swartz & Ryland,
Architects,
Fresno, Calif.

WEISTEEL

TRADE MARK
REGISTERED

COMPARTMENTS TOILET, SHOWER, DRESSING ROOM

Installations, such as this one illustrated, have given satisfying service for more than ten years in all parts of the country—a convincing weight of evidence that lasting quality backs up the pleasing appearance of "WEISTEEL."

Sixteen gauge ($\frac{1}{8}$ inch), special smooth finish, Keystone Copper-bearing steel throughout (excepting door rails and stiles); brass foot castings on all posts; special "WEISTEEL" Universal Hinges; nickel plated hardware, including heavy slide bar latch. These are a few of the details which, coupled with standardized precision methods of manufacture, are causing progressive architects to specify "WEISTEEL" exclusively for all kinds of buildings.

Better than slate or marble, with a saving of 40 to 60%.

Write our nearest office for full information.

HENRY WEIS MANUFACTURING COMPANY
FACTORY AND GENERAL SALES OFFICE
ATCHISON, KANSAS



DISTRICT SALES OFFICES
CHICAGO: 105 West Monroe Street. BOSTON: 24 Milk Street.
NEW YORK: 110 W. 34th Street LOS ANGELES: 616 S. Utah St.

RATING CARD FOR VERMONT RURAL SCHOOLS.

There has been considerable interest aroused and much activity is promised in many districts of Vermont in the direction of standardizing the rural schools of the state. What this means to the rural communities served by these schools can be appreciated by those interested in rural education and its progress in the future.

The state of Vermont has recently adopted an official rating card for rural schools through which it is planned to raise the standard of the schools and to encourage these communities in maintaining proper educational requirements both in buildings and equipment. The card must be filled out and reported by the district superintendent after a visit or inspection. A tentative rating is made in the fall or winter, and the official rating is made as soon thereafter as possible.

The front of the card contains space for the name of the town, school, district, name of teacher and home address, name of district superintendent and state supervisor, date of scoring, rating with score of credits, and date of checking. A list of the requirements for obtaining credits for a score, for standard and superior ratings, is also provided. The card contains the following information on requirements which must be met in order to secure a rating of "standard" or "superior":

STANDARDIZATION OF THE RURAL SCHOOLS OF VERMONT.

I. Building and Grounds.

- (2) 1. **APPEARANCE**—Neat and attractive, exterior and interior of building; also school grounds neat and well cared for with shade trees planted.
- (4) 2. **GENERAL REPAIR**—Good foundation, smooth tight floors (1); no leaks, suitably painted (1); all windows and doors with locks in good working order (1); fully screened from flies (1).
- (4) 3. **LIGHTING**—Glass area at least one-fifth of floor area (1); light admitted only from the left or left and rear of pupils (2); windows with adjustable shades in good condition (1).

- (4) 4. **HEATING AND VENTILATION**—Ventilating heater, or stove, with a jacket about eight inches from the floor, with satisfactory fresh air inlet and foul air outlet, or furnace, with window boards used in at least four windows.

- (4) 5. **CLEANLINESS**—Swept and dusted in a sanitary manner after school hours, at least twice a week, with dampened or oiled sawdust used if possible (2); a thorough house-cleaning at least once a year (2).

- (8) 6. **OUT-BUILDINGS**—Two completely screened sanitary dry closets at least twenty feet from the school building and one foot or more apart (1); connected with the schoolroom by a well ventilated and lighted divided passage-way having a good roof and floor, entered only from the schoolroom and leading to separate closets for the sexes (4); or sanitary chemical or flush closets (5); closets carefully supervised (1); well ventilated and regularly disinfected (1); fuel house convenient and in good repair and separate from girls' toilet (1).

II. Equipment.

- (6) 1. **FURNITURE**—Tables and chairs of three sizes or chair desks of three sizes or single adjustable desks or desk of three sizes. When new ones are bought they must be chairs and tables of three sizes or single adjustable desks. Tables and chairs of three sizes or chair desks of three sizes, or single adjustable desks are required for Superior rating. Teacher's desk with drawer that can be locked, and two good chairs, reading table, recitation chairs, case or shelves for books, protected shelves for lunch boxes, bulletin board.
- (2) 2. **BLACKBOARDS**—At least sixteen lineal feet not less than 3 feet wide, in good condition, with one or more sections, not more than 24 inches from the floor.

- (4) 3. **TEXTBOOKS**—Modern, in good condition, in quantity to supply the needs of every pupil.

- (6) 4. **SUPPLEMENTARY BOOKS AND SUPPLIES**—Covered wallmaps of the World, United States, Vermont, a globe, a large up-to-date dictionary and several small ones (1); a library of at least 10 books, with five new ones added each year, all to be selected from a list approved by the State Board of Education or the Commissioner of Education (2); at least two sets of supplementary readers for each grade (1); at least three kinds of primary material (1); use of traveling library (1).

- (2) 5. **DRINKING ARRANGEMENTS**—Covered tank with faucet, regularly cleansed, and individual drinking cups, or drinking fountain.

- (1) 6. **FLAG**—A flag flying outside and not one smaller than two by three feet displayed inside at all times when school is in session.

- (2) 7. **APPARATUS FOR ORGANIZED PLAY**—Equipment of bean-bags, swing, ropes and rings, basket ball and other play apparatus.

- (4) 8. **MISCELLANEOUS**—Clock, first-aid outfit, thermometer, individual towels used, wash basin, liquid soap or soap powder used from container, mirror, waste basket, pencil sharpener, shoe scraper, door mat.

III. Teacher.

- (4) 1. **TRAINING AND EXPERIENCE**—Must have had at least twenty-four weeks of successful experience; (a) holds Qualification of New Life State Certificate; (b) or holds Probationary State Certificate and has completed three years of high school and one or more years of approved teacher training.

- (10) 2. **EFFICIENCY**
a. Administration and Teaching: School management, reports, etc., well

Why the Laboratory Drain Lines Should be Duriron



Lead

Duriron

Brass

Before Acid Test



Lead

Duriron

Brass

After Acid Test

The photograph to the left shows sections of "extra heavy" lead pipe, Duriron pipe and brass pipe, all two inch size.

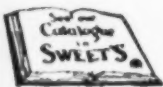
Photograph to the right shows the same sections after the lead and brass were each submerged in Nitric Acid, 25° strength, for 72 hours.

The Duriron section was submerged 336 hours in the same acid.

While this test of the Duriron pipe was of too short duration to prove its resistance to the acid action, it does show the rapid failure of lead and brass when exposed to Nitric Acid, one of the most commonly used in the school laboratory.

The United States Bureau of Standards' test on Duriron in 25° Nitric Acid showed a loss of 7/1000's of 1% in a period of 120 days.

We will gladly send you our book
DURIRON ACID-PROOF DRAIN PIPE



The Duriron Company, Dayton Ohio



- kept (1); daily preparation (1); well planned school program (1); every pupil profitably employed (1); steady advance of pupils (1).
- b. Influence of teacher's Personality: Cooperation with parents (1); homes visited (1); out-door activities, walks, sports, at least two week-ends a month spent in community (2); loyalty to profession (1).
- (4) ' 3. **PROFESSIONAL SPIRIT**—Attendance on state and district educational meetings, must take at least one educational journal, and read each year at least two professional books selected from a list approved by the State Board of Education or the Commissioner of Education.
- (18) **IV. Pupils.**
- (2) 1. **REQUIRED ATTENDANCE**—An average of not less than 90 per cent for the two terms last completed before the date of approval by the State Supervisor of Rural Schools.
- (4) ' 2. **PERSONAL APPEARANCE AND CONDUCT**—Neat, clean, orderly, polite, industrious.
- (6) ' 3. **SENSE OF RESPONSIBILITY**—Must show a personal interest in the general welfare of the school, and Special care for school property.
- (12) **V. Community.**
- (3) 1. **SALARY**—Minimum salary of \$25 per week (3); \$20 per week (2); below \$20 no credit.
- (3) * 2. **LIVING CONDITIONS FOR TEACHER**—The community must provide suitable living conditions for the teacher.
- (3) 3. **RETAINING TEACHER**—Same teacher retained in the same school for more than three consecutive terms.
- (3) 4. **MEETINGS, FAIRS, EXHIBITS, ETC.**—Parent-Teacher Association, definite community support in regard to general welfare and health work among children.
- (5) 5. **SPECIAL POINTS OF MERIT**—Hot lunches at noon; two extra thorough

house cleanings; streopticon and approved slides; or radioscope; or stereoscope and approved stereographs; victrola and six or more approved records; suitable pictures and decorations; garden; other desirable community work, etc.

(17) The back of the card contains some of the essentials underlying the standardization program, including the purpose, plan, awarding of name plates, and giving of state aid. Schools whose rating card shows a total score of 75 or more credits as rated by the superintendent, when approved by the state superintendent of rural schools, will be awarded one of two name plates.

A name plate bearing the words "standard school" is awarded to schools scoring between 75 and 89 inclusive on the rating card. A name plate bearing the words "superior school" is awarded to schools rating 90 or above on the rating card. A superior school must be taught by a teacher of superior qualifications and with the highest efficiency.

Standard schools are rated once a year. Approved lists of all standard and superior schools are kept on file in the office of the Commissioner of Education. If a school no longer has the required total score for standardization, conditions must be improved without delay, or the name plate will be removed.

The sum of \$10,000 has been set aside by the state board as a help in this work. Schools desiring state aid must make application and give the plan for complete standardization. If the plan is approved by the state supervisor, a sum equal to that which the town or community will put into improved equipment for the school not to exceed \$200, will be given. State money must be spent for approved permanent furniture and equipment as required under the rules.

Repeal of Lusk Law Urged.

The New York law which subjects the teachers of the state to a test of loyalty to the government and its institutions is being vigorously opposed.

The Teachers' Union of New York has issued a pamphlet which quotes the public press and school officials urging the repeal of the so-called

Lusk law. The gist of the protest voiced is that the law tends to bring the teaching profession under unwarranted suspicion and serves as a censorship which is destructive of a fundamental right in the domain of thought and speech.

Praising School Book Publishers.

Praise for book publishers, as an integral part of public education, was accorded by schoolmasters at Bethlehem, Pa., during a meeting of the Pennsylvania State Educational Association.

Dr. E. C. Broome, superintendent of Philadelphia in addressing the representatives of publishing houses said:

"The schoolmen are glad to thank the book publishers for their work today. You are every bit as much teachers of children as we are, for the generations of the future are all that we leave behind us and the business man, manufacturer and all have a duty to the children to see that they carry on the ideals which inspire us.

"We are trying to handle the selection of books for our schools in the fairest way possible. Every book is submitted to certain members of our staff who go through it in a professional manner, so that recommendation for adoption or rejection is made only after earnest thought.

"It means a lot to the educators that the book publishers carefully go over their manuscripts before they reach us. Many are rejected that we never see, and it saves us much time that formerly was wasted by the publication of unnecessary or poorly written books."

Governor Supports Superintendent.

Governor Pinchot of Pennsylvania has given attention to school costs in his state and has come to the support of Dr. Finegan, state superintendent, who has held that the support given the financial aid extended to the schools of the state has been inadequate.

The policy maintained by Dr. Finegan is also sustained by experts who have made a study of the distribution of state school funds and find that the poorer districts do not receive the support they are entitled to. The governor has placed himself on the side of the school champions.

You Buy LOCKERS But Once!

The Locker Equipment in your school is just as permanent as the foundation or the roof. The Lockers you buy now are going to be in use for a long, long time. They will either give you good service and lasting satisfaction, or prove a continual annoyance that you must "put up with" indefinitely.

What is the first thing that begins to "go wrong" about the ordinary type of locker? The hinges give way under the excessive weight of the old-style door—the door sags and binds at the bottom or side—the latch fails to operate—and your locker is no longer a locker.

DURABILT Steel Lockers

are different. The hinges (exclusive design, made in our own factory) have *double contact*—they wear at least twice as long—and they are adjustable to take up *all wear* in the future.

Durabilt doors need never be out of true alignment and perfect operating condition. They latch automatically when closed—not necessary to lift or turn a handle—certainly a valuable feature in school lockers.

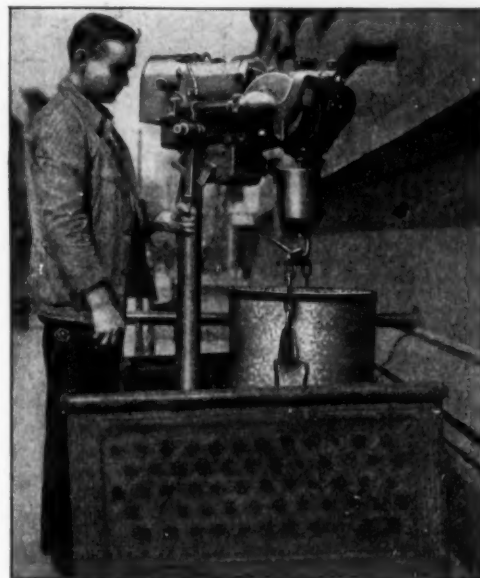
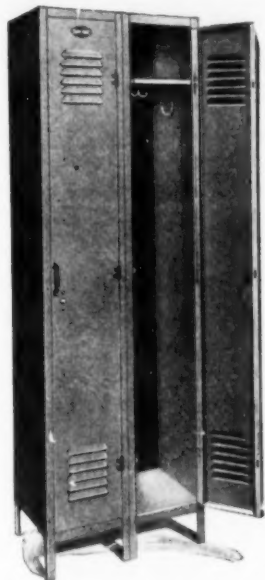
Durabilt Steel Lockers are *Secure*—can not be forced open when locked. Your "pilfering" annoyances are over when you use Durabilt.

You Buy Lockers But Once! Why not have the *Best*? Remember the famous Durabilt Slogan—

"No Better Built Than Durabilt!"

Durabilt Steel Locker Co.
400 Arnold Ave., Aurora, Ill.

Send for
Circular 5009



15½ TONS of Ashes raised for 3½ cents

THE G & G Model E Electric Telescopic Hoist in use at the main Long Island Building of the New York Telephone Company was tested for cost of power consumption. Engineers of the Sprague Electric Works of the General Electric Company conducted this test for us. Cans containing 105 lbs. of ashes were raised at the rate of 296 cans in one k. w. h. or at the rate of 15.54 tons of ashes. The height of lift is 16 feet 8 inches. Cost of current is \$.0348 per k. w. h. Therefore 85 cans of ashes are raised for the remarkably small cost of one cent. This test, we believe, establishes a new record for economical ash removal.

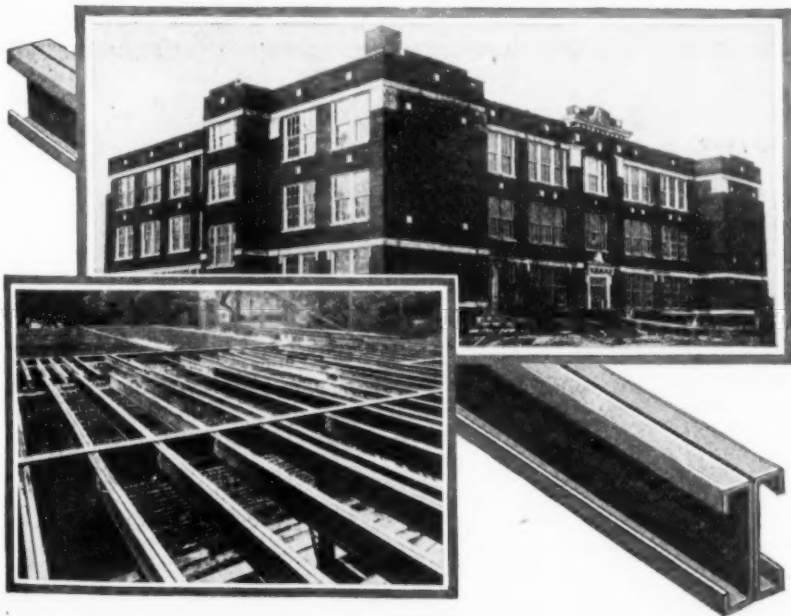
How much does it cost you to remove ashes?

If you are interested in getting the complete story of G & G ash removal equipment ask your architect. He has our Catalogue in his files. Or we will send you a Catalogue direct on request.

GILLIS & GEOGHEGAN
551 West Broadway New York



Telescopic Hoist
With Automatic Stop and Gravity Lowering Device



Firesafe Floors for Schools

In no public buildings is fire safety more important than in schools. And not the least in importance is the fire safety of floors. Yet most forms of fire-safe floor construction involve a tremendous weight in materials.

This can be avoided by the use of National Steel Joist floors, which have half the dead weight of other types of recognized fire-proof floors. Sturdy, sound-proof, economical and easy to erect.

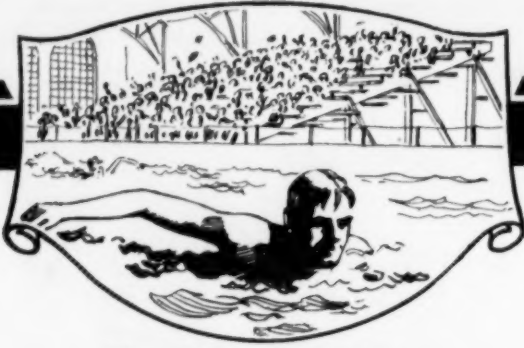
Write for booklet giving complete information.

THE CENTRAL STEEL COMPANY

Massillon, Ohio



**NATIONAL
STEEL JOISTS**



Safe Seats

UP QUICKLY—Stored Compactly

For indoor or field, Knock-down Bleachers are becoming a necessary part of the equipment for every college, school, civic organization, Y. M. C. A., or large industrial plant. Can't mar the finest floor. Are always ready on a moment's notice for any emergency or for permanent seating. Knock-down Bleachers come in fourteen foot sections, 3 to 15 tiers high. Strongly ironed, will endure the wildest crowds with perfect

safety. Not in the circus seat class. Foot rests are below the seats. This arrangement makes them comfortable and protects clothing. Structural details of supporting jack and the heavy ironing of the seats, foot boards and stringers are shown below. The best proof that Knockdown Bleachers give satisfaction, is the fact that users all over the country increase their Knockdown Bleacher seating year after year.

Write for Particulars.

LEAVITT MFG. CO.,
365 Griggs St., Urbana, Ill.

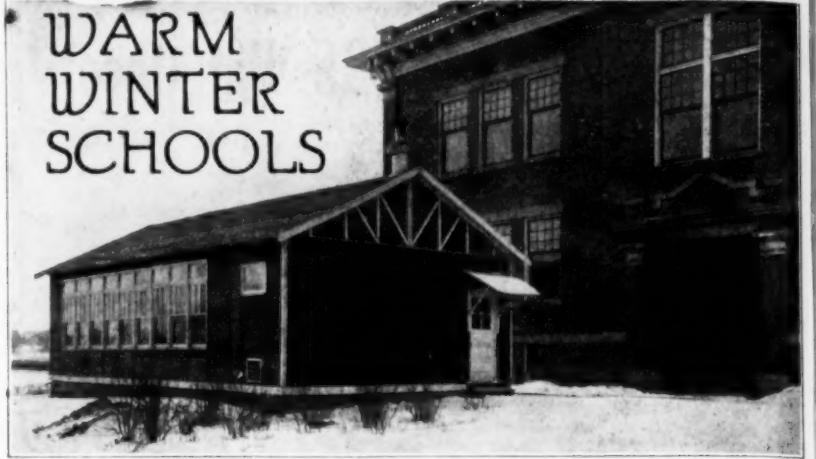
Up for a day or to stay



**KNOCKDOWN
BLEACHERS**
TRADE MARK
REG. U. S. PAT. OFFICE



WARM WINTER SCHOOLS



CIRCLE "A" SCHOOLS ARE EASILY HEATED

YET they are perfectly portable. The sections are finished in every detail at the mill, inside and out, plaster walls and all. They require only to be set up. Any carpenter and a helper can do it. Easily taken down, too, should you wish to move them.

If you need more room quick, Circle "A" Portable Schools are the kind to get. No need to wait until the winter is over. Write today.



GET THIS BROCHURE

"Good SCHOOLS Quick," is the name of an illustrated brochure that tells all about these very desirable buildings. Send for a copy. It is worth reading.

CIRCLE A PRODUCTS CORP.

Chicago New York Pittsburgh Detroit
St. Louis Kansas City Indianapolis Lansing
Cleveland Cincinnati



MAIN SALES OFFICE
CHAMPAIGN, ILLINOIS



An EVANS VANISHING DOOR Product FOR SCHOOLS



That Pays for Itself With
FLOOR SPACE SAVED
WARDROBES, Class F

made for plaster Backs and Ends, no divisions, and with Evans Process Hollow Sanitary Door, hung on double pivoted arms, without guides, tracks or rollers, swing easily and silently. They cannot stick or bind. Made with or without Blackboards. Hardware can also be purchased separately.

More Than a Million Hang Their Wraps in
Evans Vanishing Door Wardrobes

Trade Mark
VANISHING DOOR
U. S. Reg.

Catalog
"PICTURES THAT TALK"
Sent on Request

W. L. EVANS

700 Block O

Washington, Ind.

SEND FOR NEW CATALOG No. 3



MANUFACTURERS OF



**SCHOOL GYMNASIUM
AND PLAYGROUND
EQUIPMENT**

SEND US YOUR SPECIFICATIONS

DON'T LOCK THEM IN!!
keep the way
to SAFETY - OPEN - ALWAYS with



GRAVITY EXIT LOCKS

TWO Locks in ONE. And not a Single Spring in either Lock to get out of order.

Valuable School Property always **DOUBLY** secured, because each Locking Point is an independent unit.

Lever Action at the Crossbar. No Spring Action at this Vital Point of operation.

No Lost Motion. When the Crossbar moves three-eighths of an inch the Locks are released.

No **FORCING DOWN** or **LIFTING UP** of Crossbar necessary. A small child leaning **AGAINST** the Crossbar will instantly release the Door.

Responds to the slightest touch of any Panic Lock made. An Adult can release the Door by the pressure of the **LITTLE FINGER**.

These Locks are as **UNFAILING** as the law of **GRAVITY** itself. They are built on **EVERLASTING PRINCIPLES** for **EVERLASTING SERVICE**.

FIRST COST is the ONLY COST.

FRANK F. SMITH HARDWARE CO.

NEWARK, - NEW JERSEY

The Lock Smiths of Superior Exit Devices.

INDIANA EDUCATIONAL SURVEY.

Eleven essentials in better education are to be attained by Indiana before it may take the lead in the educational world according to a report submitted by the Indiana Educational Survey Commission to the governor of the state. The essentials outlined in the report which were submitted to the legislature in January, are as follows:

1. Better trained teachers.
2. Pay better salaries.
3. Better school buildings.
4. Larger and better kept playgrounds.
5. More and better school equipment.
6. Additional teacher training institutions.
7. Abolition of the trustee system.
8. Reorganization of the state and local school administrations.
9. Establish a new licensing system.
10. Form more consolidated schools.
11. Offer better financial support.

These improvements and many more may be made possible by eliminating an enormous waste in expenditures incurred by poor judgment and in erecting buildings and purchasing properties.

The commission does not recommend an elaborate legislative program. It suggests but three major pieces of legislation. One deals with a better plan of state organization and administration, likewise with the local administration, and seeks improvements in teacher training, recommending a consistent licensing system with salary schedule.

The report reveals that pupils in country schools are farther advanced than those in the city according to their grades, and that Indiana pupils generally are below the American average judging by the same standard. While the country grades are more advanced than city grade studies, the country pupils usually are older than those in the cities, due to the short school terms and poor attendance conditions.

Rural teachers are immature, unprepared, inexperienced and lack teaching skill, the report declares, and charges that trustees appoint them for political reasons rather than for excellence of qualifications.

Other findings in the report are as follows: Teachers in high schools of smaller towns are poorly trained and lack experience and find

it difficult to keep a pace ahead of the student. General level of instruction in these schools is lower than in western and northern states. High schools of larger cities are well managed, and as good as can be found in the United States.

Only 25 per cent. of teachers in elementary schools are satisfactorily trained, most of them being found in city schools. Fifty-two per cent. of city teachers are satisfactorily trained, compared with 22 per cent. in small towns and ten per cent. in townships.

With seventy-five per cent of all elementary teachers and 96 per cent of teachers in one-room schools improperly trained, good work by pupils cannot be expected. Only 62 per cent of high school teachers are satisfactorily trained. Recommended slight increases in the salary of inexperienced, standard-trained teachers in both elementary and high schools, former from \$966 to \$1,000 and latter to \$1,200.

Teacher training work at Indiana University and State normal school should be reorganized as first step to overcome these conditions.

Eighty per cent of the 4,511 one-room school-houses in the state were built before 1910 and are in bad condition, worthy of condemnation by the state board of health.

Indiana with its 800 schools has "the mere skeleton of an educational system." Low standards prevail. Quality of instruction, more so in smaller high schools is poor and the cost is excessive. The result is that thousands of students graduate annually from high schools unequipped to take up their duties of life. Colleges thus are handicapped.

Standards should be raised, school terms lengthened, teachers should be better trained, small high schools should be eliminated or consolidated.

Vocational education should be an integral part of the public school system and the amount of money spent should be decided according to the needs of all other forms of education.

Office of township trustees should be abolished because the trustees' duties have been reduced and the school duties should be given into the hands of county commissioners, the county board of education and the county superintendent assisting.

The office of county superintendent should be taken from politics. If county superintendents lose their position, they seldom return to teaching. The superintendents now are residents of the county by which they are employed and this system prevented the employment of superintendents from another part of the state who might be more efficient.

State school administration lacks vigor and continuity, indirectly recommending that the office of state superintendent be made appointive instead of elective.

Total school expenditures for the year 1920-21 were 38 per cent of taxes collected by the state.

A COUNTY PROGRAM OF SUPERVISION.

Supt. H. E. Hall of Wood County, Ohio, has prepared and placed in the hands of each teacher a definite program for supervision of the rural schools. The program outlines specific points which the several assistant supervisors and Mr. Hall personally will look for in their supervision of the schools. The program is as follows:—

Supervision Program.

The Wood county School District 1922-1923.

I. The Purposes in sending to Teachers and Superintendents the County Supervision Program are:

1. To call attention to special topics and projects to be emphasized in the year 1922-1923.
2. To bring into our schools something of the newer practices and tendencies in education.
3. To secure the maximum results from supervision of instruction.

II. Aim of Supervision: The Improvement of Teaching.

III. Topics that are to be given Special Attention during the Present School Year:

1. Proper Grouping of Pupils.

(1) Starting practice of admitting to school on physical and mental tests such children as are able to make reasonable progress in school.

(2) By classification and reclassification of pupils so as to secure such grouping as will enable each pupil to make the best progress possible, and enable the teachers to do the most effective work in all grades.

What the Teacher Wants



SUPPLYING a general need is one thing, but supplying the *desired* article is another. And it does not take a college professor to see at a glance why every teacher who has seen or used a Continental Special School Scale, would want no other.

It is only human to prefer a scale which can be moved about easily and which will permit the teacher to weigh the entire class efficiently, *without leaving her chair*. Scores of teachers know that they have played an important part in the design of

THE CONTINENTAL

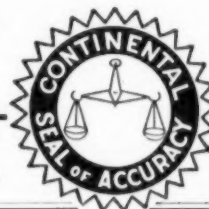
For efficiency, convenience and everyday practicality, the Continental cannot be beaten. There is no weighing or measuring feature the Continental does not carry. Yet it embodies enough additional patented improvements to rank supreme anywhere. And the price is right.

Let us tell you the details of construction and where it can be seen. Drop us a line today.

CONTINENTAL SCALE WORKS

2130 W. 21st Place, Chicago
80 Murray St., New York

The "CONTINENTAL Seal of Accuracy"
Your Quality Protection and Guarantee



Note: The County Superintendent's office can supply the superintendents with a limited amount of samples of materials for both intelligence and achievement testing.

2. Definite Standards for the Subjects of the Elementary Curriculum.

The teacher should not only be familiar with the brief outline in the Wood County Course of Study but she should know specific standards such as:

A goal in Silent Reading must be more specific than "ability to get thought from the printed page." It is better to have a goal, as ability to read ordinary nontechnical material at a rate of not less than 240 words per minute and at the same time get thought so as to be able to answer questions on, or reproduce, not less than 95% of the ideas in the selection. That would be a definite goal which might be set as the end to be attained by at least half the children by the end of the eighth grade.

Having established such a goal we may look for the intermediate goals or guides which will enable us to know what progress we are making toward this ultimate end.

We have grade goals as:

Grade I, speed 50, comprehension 50 per cent.
Grade II, speed 95, comprehension 60 per cent.
Grade III, speed 125, comprehension 70 per cent.

Grade IV, speed 150, comprehension 80 per cent.

Grade V, speed 180, comprehension 85 per cent.

Grade VI, speed 200, comprehension 90 per cent.

Grade VII, speed 220, comprehension 93 per cent.

Grade VIII, speed 240, comprehension 95 per cent.

Teaching children to add well is also vague until how well is indicated in terms of rate and accuracy for a definite type of example. Books on method will give this information, e.g., in simple addition operations the third grade teacher should bring her pupils up to an average of 26 correct combinations per minute. The fourth grade teacher has the task during the year that the same pupils are under her care, of increasing their addition speed from an

average of 26 combinations per minute to an average of 34 combinations per minute. The fifth grade teacher is to take pupils with an average rate of 34 and bring up their speed to 42, a perfectly definite task. The sixth grade teacher is to take pupils with an average of 42 and carry them before the end of the year to an average of 50 combinations. Seventh grade to 58 and eighth grade to 63 combinations.

Definite Standards in Speaking and Writing English are given in 1922-23 O. T. R. C. book—"Speaking and Writing English." The book is a course of study in English for the elementary grades. It has proven its worth and is already in use in many cities and counties throughout the United States.

3. Doing of Diagnostic and Remedial Work in Reading.

Mimeographed suggestions for doing remedial work will be given to all teachers in the elementary grades.

4. Teaching by Projects.

History and Geography in fifth, sixth, seventh and eighth grades.

Reading and Language in the Primary Grades.

Reference books—(1) Projects for all grades: Twentieth Yearbook of the National Society of Education, Part I, Public School Publishing Co., Bloomington, Ill. (A collection of 285 projects).

(2) Bonser, F. G. The Elementary School Curriculum-Macmillan Co., New York. (Chapter 6-The Project Method and the Curriculum). Ch. 7. Illustrations of two types of project organization.

(3) Redirection of High School Instruction, Wilson and Lull-Lippincott Co.

5. Systematize and Improve the Socialized Recitation so as to secure maximum of profitable pupil activity.

6. Training Pupils for Effective Study: Develop habits of economy and independence in attacking and mastering the lessons.

7. Encourage Improvement of Teachers in Service.

(1) Through extension work. (2) Teachers' meetings (3) O. T. R. Course.

(a) Effective Study (Should be studied by all teachers.)

(b) Speaking and Writing English (Should be studied by all elementary teachers and teachers of English in our junior high schools.)

(c) Teaching Geography by the Problem Method (Should be studied by all Geography teachers.)

(4) Through reading other helpful literature.

(5) Through use of self-rating cards.

(6) Group conferences for teachers who have similar difficulties or problems.

(7) Group conferences for teachers whose personalities or social attitudes limit their efficiency in school work.

8. By helping the teacher to become a constructive factor in extra rural and community activities.

9. By cooperating with the teacher in carrying on helpful publicity work in her school and community.

TEACHERS' SALARIES.

—New York, N. Y. Regardless of whether the city has reached its constitutional limit, the board of estimate must appropriate funds to pay the salaries of the City College staff, according to a ruling of the State Supreme Court. Mandamus proceedings had been brought by the trustees of the College to compel the board of estimate to restore a cut of \$226,559 made in the 1923 appropriation for salaries of the staff.

—Hartford, Conn. Statistics on teachers' salaries, prepared by the board of education for report to the State Board of Education show that approximately 500 of the 681 teachers in the elementary schools of the city have taught school more than four years, judged by the salaries they receive. Women teachers exceed the men by thirteen to one in the elementary schools and fully two to one in the high schools, and the majority of the salaries paid men teachers are above the maximum paid the women teachers. In all there are 834 teachers in the public schools, including high school, district schools, ungraded, outdoor and manual training departments.

—Salem, Mass. Teachers in the schools received increases of \$200 in salary, effective January first.

STEGER SONG BOOK



of **111**
Favorite Selections
for **Community Singing**
Home Happiness
School Exercises

Edited by Dr. J. Lewis Browne

This is just the book you need. A comprehensive collection of old and new favorite songs—patriotic numbers, folk songs, the melodies close to every heart.

For instruction purposes this book is ideal. The songs greatly desired in school work are included in simple keys, correctly arranged.

Complete with words and music

Selected paper and careful printing make this book easily readable. Priced so low that all schools can afford to give one to every pupil.

Send for a copy today

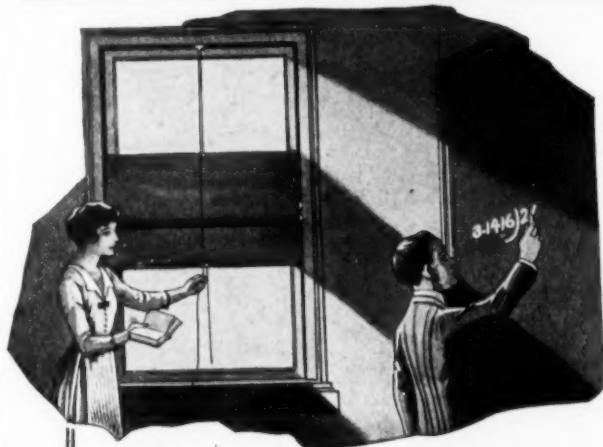
PRICES: 100 copies, 7c each (f. o. b. Chicago). \$1.00 per dozen, prepaid. Single copies (and less than dozen lots) 10c each, prepaid.

STEGER & SONS

Piano Manufacturing Company
300 Steger Bldg., Chicago, Ill.



If it's a STEGER—it's the most valuable piano in the world



Winter Air and Sunshine In Your Schoolroom

WINTER air is good—and winter sunshine, too. But it is truly difficult to get proper schoolroom ventilation with protection from the glare unless Hartshorn two-way shades are used.

With these shades you can not only regulate the light but can feel assured of proper ventilation through partly-opened windows.

For proper shade service in the classroom, specify Hartshorn. Distributed by converters throughout the entire country.

Write for colors 214 and 204 in Tinted Cambric. They have been approved by competent chemists and adopted by school boards of many municipalities.



Established 1860

STEWART HARTSHORN CO., 250 FIFTH AVENUE, NEW YORK



UNDERWOOD • STANDARD • TYPEWRITER

THE discriminating buyer always WANTS the BEST—in typewriters as in everything else.

When you purchase an UNDERWOOD for use in your schools you not only buy the typewriter that has PROVED itself superior to every other machine in speed, accuracy and durability by winning the World's Championship Typewriting Contests for seventeen consecutive years, but you also buy an EDUCATIONAL SERVICE that is unapproached.

Monthly Expert Typing Tests; bronze, silver, gold and diamond medal awards; a new school champion typist's Honor Roll; demonstrations and helpful talks by various Champion Typists—all a part of UNDERWOOD EDUCATIONAL SERVICE—stimulate the students' interest in typewriting, and used in conjunction with the WORLD'S BEST TYPEWRITER, enables your typewriting teacher to secure maximum results in the shortest time.

UNDERWOOD TYPEWRITER COMPANY

30 VESEY STREET, NEW YORK CITY

Branches in all principal cities

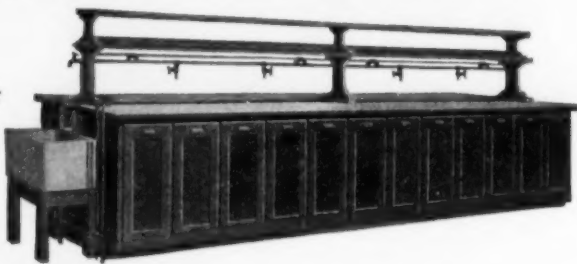
LABORATORY FURNITURE

WHEN you buy Laboratory Furniture from LEONARD PETERSON & CO., INC., you are purchasing more than so many tables and cases—you are buying Laboratory Furniture backed by thirty years of thorough knowledge of a highly specialized industry—you are benefited by painstaking attention to all details that go to make Laboratory Furniture right in design and quality.

Leonard Peterson & Co., Inc.

Manufacturers of Guaranteed Laboratory Furniture
Office and Factory: 1222-34 Fullerton Ave., Chicago, Ill.
New York Sales Office: Knickerbocker Bldg., 42nd and Broadway

Send for our
Catalog
No. 11-A



Fales Laboratory Desk (Patented)
for General Chemistry, Quantitative Analysis, and Organic Chemistry

Leonard Peterson & Co., Inc.
Sole Manufacturers.

Send for circular describing this desk.



SCHOOL TELEPHONE SYSTEMS OUR SPECIALTY

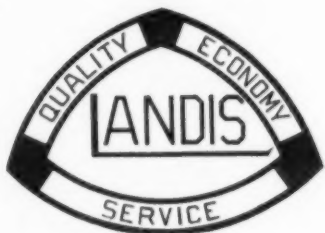
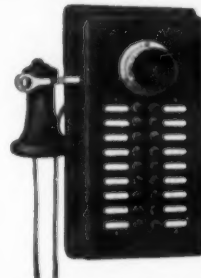
We have been manufacturing
HIGH QUALITY TELEPHONE APPARATUS
—For 22 Years—

And have developed system arrangements
to meet any service requirement.

We will gladly submit
SAMPLES
AND COMPLETE
QUOTATION
covered by your
specifications

A Good Proposition
for Contractors

Federal Telephone and Telegraph Company
BUFFALO, NEW YORK



Electric Clock Systems

Our equipment is most simple, economical and reliable.

We can supply the needs of the small school as well as the large one, at prices in proportion.

There is no reason why your school should not have a suitable system of this kind.

Some users:

Board of Education, Philadelphia, Pa.,
125 installations;
Board of Education, Baltimore, Md.,
15 installations;
Board of Education, Butte, Mont.,
7 installations;
Board of Education, El Paso, Tex.,
5 installations;
Board of Education, Durham, N. C.,
2 installations.

Write for literature.



LANDIS ENGINEERING
& MFG. CO.

Waynesboro,
Pa.



SOUNDLY
BUILT

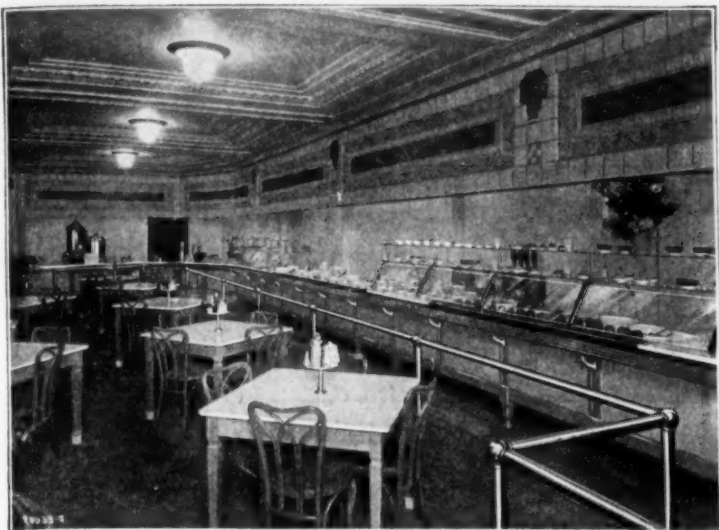
PERFECTLY
VENTILATED

UNIVERSALLY
APPROVED

M & M PORTABLE SCHOOLS

Ask for Catalog

Mershon & Morley Company -:- Saginaw, Michigan
Established 1898



Stegemeier's New Cafeteria at Indianapolis. It is a typical Van installation. The counters and tables are arranged to give maximum efficiency.

We have recently issued a catalog of 364 pages displaying the individual items of Van's equipment. This book should be in the hands of every buyer of Cafeteria and Kitchen equipment for schools to facilitate quick and satisfactory replacements. Write for your copy.

School Cafeteria Equipment

A Specialty of Van's

For over 70 years, we have been installing Kitchen, Dining Room and Cafeteria Equipment. We are equipped with every facility to render the greatest service to our customers.

We maintain a staff of engineers and food service experts that will look into your problems and advise you or your architects.

Write

The John Van Range Co.

EQUIPMENT FOR THE PREPARATION AND SERVING OF FOOD

Cincinnati

CHICAGO

CLEVELAND

THE EDITOR'S MAIL

QUESTIONS AND ANSWERS.

School Accounting Systems for Small Districts.

96. Q:—We are desirous of putting in an effective accounting system to cover two districts each expending something like \$25,000 annually. The one is a local common school district, the other a high school district covering several common school districts.—F. E. D., Fruita, Colo.

A:—THE SCHOOL BOARD JOURNAL has published from time to time articles written by experts on school accounting for small school districts. The following comprises a list of the articles published in recent years:

The Accounting System of a Small City District, by H. P. Smith, Superintendent of Schools, Newton, Ia. School Board Journal, May, 1915.

School Reporting and Accounting in a Small City, by C. C. Green, Superintendent of Schools, Beaver Falls, Pa. School Board Journal, May, 1917.

Budget Making by the Board of Education, by Wm. T. Keough, Business Agent, Boston Public Schools. School Board Journal, August 1918.

Uniformity in School Accounting, by James Storer, Secretary Board of Education, Buffalo, N. Y. School Board Journal, September, 1918.

Cost Accounting in a Small City, by Isaac Doughton, Superintendent of Schools, Phoenixville, Pa. School Board Journal, June, 1921.

An Accounting System for the Smaller School District, by Fred Engelhardt, Director of Administration, Pennsylvania Department of Public Instruction. School Board Journal, September, 1922.

We do not know whether you have kept your files of the School Board Journal. If not, you very likely have a copy of the September, 1922, edition, containing the Engelhardt article, which will prove most helpful in providing a system.

The necessary record blanks and accounting books for a complete system may be obtained from the C. F. Williams Company of Albany, N. Y.—Ed.

Statistical Terms.

94. Q:—I see in articles in the Journal, the word "median," especially in papers dealing with salaries of teachers. Please define "median" and distinguish it from "average."—V., Colorado.

A:—The term "median" is statistical and means a "value which has the central position in a series of items arranged according to size. The term quartile is used very frequently and means a "value one-quarter or three-quarters down the range of a series of items arranged according to size."

The term average or more properly the simple arithmetic mean, denotes the size which all the items of a series would have if they were made equally large, without changing the sum total. The simple arithmetic mean is found by dividing the sum of a series of items by their number.

The following table illustrates in the simplest form possible the three terms. While in this table the average, or arithmetic mean, is 16, the median is Lynn, 18. The quartiles fall between 12-12, and 18-20, and are 12 and 19 respectively. Number of Pupils per 100 Enrolled Receiving High School Instruction in Certain Cities.

Cities	
New Bedford	7
Fall River	12
Lawrence	12
Worcester	17
Lynn	18
Brockton	18
Holyoke	18
Springfield	20
Somerville	22
Median	18
Lower Quartile	12
Upper Quartile	19
Arithmetic Mean	16

The term mode is also used in statistics. In its simplest use it is the value which occurs "most frequently in a series of items and around which the other items are distributed most densely." The idea of mode might be illustrated by the deposits of school children in a school savings bank, as follows:

Number of Children	Amount Deposited	Total Deposits
1	.03	.03
5	.05	.25
4	.08	.32
15	.10	1.50
6	.15	.90
4	.20	.80
2	.25	.50
1	.50	.50
1	1.00	1.00
30		5.80

In this tabulation the arithmetic mean is 14.8 cents and the median is fifteen cents but neither figure is typical. The mode is ten cents, because that is the most typical sum deposited. Both the average and the median are unbalanced by the two youthful capitalists at the lower end of the list.

For anyone who is interested in statistics the following books are of value:

Bailey & Cummings' Statistics, A. C. McClurg & Co., Chicago; Zizik's Statistical Averages, Henry Holt, New York City; Bowley's Elements of Statistics, P. S. King & Son, London, Eng.; Elderton's Primer of Statistics, A. & C. Black, London; Secrist's Readings and Problems in Statistical Methods, Macmillan Co., New York City; Yule's Introduction to the Theory of Statistics, Chas. Giffin Co., London; Brinton's Graphic Methods for Presenting Facts, Engineering Magazine Co., New York.

Elective and Appointive School Boards.

97. Q:—What statistical information can be obtained on elective and appointive school boards? What cities have changed from the appointive to the elective system? What statistics have you on the growth of control by boards of education of medical inspection of schools.—E. E. C.

SUPERINTENDENTS!

N. E. A. Convention Hall
CLEVELAND

VISIT

1 2 4

BOOTH

VISIT

1 2 4

MENU

CLOCK
WITHOUT
BATTERIESDRUM
TYPE
PROGRAMSERVICE
SINCE
1 8 7 7

VALUABLE SOUVENIR

TIME SYSTEMS COMPANY

NEW YORK
509 Fifth Ave.PHILADELPHIA
1512 N. 13th St.CLEVELAND
530 Leader News Bldg.CHICAGO
501 S. Huron St.

A:—You will find in Bulletin 1922, No. 2, on "Administration of Schools in Smaller Cities" issued by the United States Bureau of Education, a comprehensive discussion and statistical record of the subject.

Recent surveys on the question made by cities which have resulted in favor of the elective board are reported in City School Pamphlet No. 2, September 1922, U. S. Bureau of Education. You will also find some statistics in Bulletin 1917, No. 8, U. S. Bureau of Education, bearing on the subject, as well as in Bulletin 1915, No. 44.

We have no records to show where there has been a recent change from the elective to the appointive system. The changes have usually been the other way—namely, from the appointive to the elective. Experts on school administration uniformly favor the elective system, specially for the medium sized and smaller cities.

There has been a controversy in several cities between the regular health department and the school system as to the control of the medical inspection in the schools. While no uniformity of sentiment on the subject has been reached, the tendency has been in favor of the regular school board control.

The argument in favor of school board control of medical inspection is provided on page 35 in a pamphlet entitled "Keeping the Children Well" published by the Minneapolis board of education, 1916.

A later record, 1922, in a pamphlet entitled "Health Service" issued by National Education Association and the American Medical Association notes on page 4, that the supervision of health in the schools of 326 cities is in charge as follows: boards of education 237; city health boards 40; jointly by school board and health board 41; private 4; no supervision 4.

WHAT MEMPHIS WANTS

The school authorities of Memphis, Tenn., in conjunction with the Chamber of Commerce and Parent-Teachers Association will seek legislative action to ensure the following:

1. That the board of education be composed of seven members, two elected every two years (except three every third election) for a six-year term;

2. That the mandatory tax rate for the support of the city schools be fixed at 65 cents per \$100, and that the board of city commissioners be empowered to levy any additional rate up to \$1, such school rate to be independent of the rate for other municipal purposes.

3. That the board of education be granted the largest measure of home rule permissible under our state constitution:

(a) That the board be authorized to make changes in the textbooks selected by the uniform textbook commission,

(b) That the board of education be authorized to purchase land and other properties in anticipation of needs, even outside the city limits; and that the board be given the power of condemnation.

(c) That the board be authorized to erect and maintain parental schools.

(d) That the board of education be authorized to issue working certificates for a period of time, not to exceed six months at any one application, to children over 14 and under 17 years of age;

(e) That the board of education be authorized to issue working certificates, upon proper application and showing, to children over 14 and under 21 years of age;

4. That it shall be unlawful for any theater, picture show, or other place of public amusement to grant admission to children between the ages of 7 and 16 years, from 9 o'clock a. m., until 3 o'clock p. m., while the public schools are in session.

Rental System Adopted.

The reorganization and extension of the use of the school buildings to afford better service to the public at less cost, has been part of the work of the business department at Akron, O., during the past few months.

An entirely new system of rental, based on actual cost, has been adopted by the board, following a comprehensive study of the expense of opening each room of any given building. The exact cost of light, power, fuel and janitor service has been computed and rental charges are fixed accordingly. For example, the cost of rental at the East High School runs as follows: Auditorium, \$6.25 per hour; gymnasium, \$2.75;

swimming pool, \$2.75, and gymnasium-auditorium, \$6.75.

Free permits will be issued to all organizations approved by the board. For other educational activities, the buildings will be opened when the rent is paid. No school building will be rented for meetings of a purely commercial character, since the board feels that the renting of schools is a service proposition, and should not attempt to compete with halls or other public auditoriums.

"Facts and Figures on Our Schools."

The story of the Canton, Ill., schools is presented in a two page illustrated article in the Daily Ledger of that city. Superintendent G. W. Gaylor is the author of the same which not only tells of the gains made in the last twelve years but shows these gains in a series of graphs and charts so that every citizen may readily secure a complete picture of the schools he is paying for.

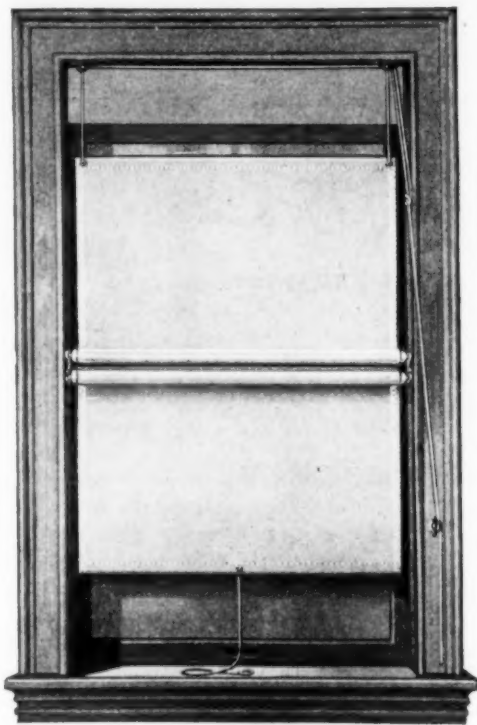
The article is amply illustrated with school-houses, new and old, demonstrating not only the progressive spirit of a local newspaper and, what is far more important, a disposition on the part of the school authorities to keep the public fully informed on the status and activities of the public school system.

Greenville Building Program.

—The building program of Greenville, N. C., contemplates a new building for colored children, and one primary and grammar school building combined in the western part of town, and a junior high school adjacent to the present senior high school plant. This will call for an outlay of approximately \$300,000. Following the completion of several hard surface roads leading into Greenville, it is planned to build in Greenville a school system which will take care of all the children within a radius of five or six miles of town. The Greenville schools in December, 1919, purchased a very fine piece of property for its teachers to live in. This was the first school system in the state to start this work on a large scale. This property, a three-story brick house, of twenty-five rooms, has been operated very successfully since the date of opening.

MAXWELL'S SCHOOL SHADES

SAVE EYESIGHT AND INCREASE EFFICIENCY



Maxwell's Airanlite Shade
mounted inside casing.

MAXWELL'S AIRANLITE (Patented)

Double Roll Canvas Shades are the best
and give the greatest satisfaction.

For use in Schools, Offices, Hospitals
and public buildings.

Can also be made of any Standard Shade
Cloth.

Can be mounted inside or outside of
casing.

Efficient, good looking, economical, trou-
ble proof and will last for years.
Can be instantly adjusted.

When single roll adjustable shades are
needed, use the Simpull Single Roll
Shade.

Can be obtained from leading
School Supply Houses.

Write for Circulars.

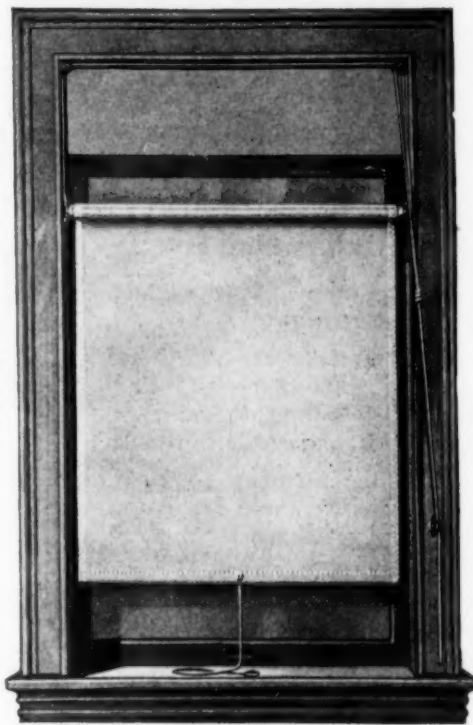
S. A. MAXWELL & CO.
3636 IRON ST. CHICAGO

NEW YORK

PITTSBURGH

KANSAS CITY

For service and quality use Maxwell's Dependable Window Shades.



The Simpull Single Roll
Adjustable Shade.

Scenery

Asbestos curtains,
Velour curtains

and

Stage scenery for your Auditorium
stage. Special, Historic, Scenic
or Architectural paintings
for front drop curtains.

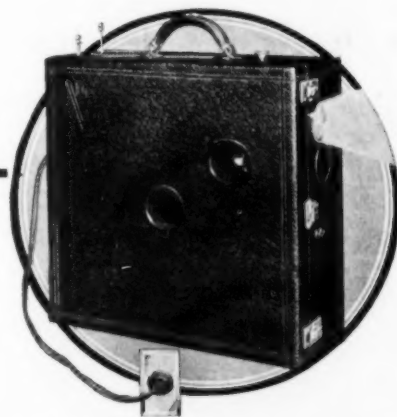
Twenty years of experience in
equipping High Schools has placed
us in a position to know the par-
ticular requirements for your stage.

Write us for further information or
request call from our representative

Twin City Scenic Company

2819 Nicollet Avenue
Minneapolis, Minnesota

Eastern Office:
301 Broadway Market Building
Detroit, Michigan



Motion Pictures!!

Many years of experience in serving the needs of
schools all over the world accounts for the prevailing
use of the DeVry as a standard in the school.

In the auditorium, as well as the class room, the
DeVry performs equally well giving clear, bright and
steady pictures from any convenient lamp socket.

Our booklet "Motion Pictures in the School" details
the uses of the DeVry in School systems all over the
country, including such systems as the Detroit, St.
Louis, New Orleans, San Francisco, Portland School
Systems. Fill in and mail the attached coupon for
your copy.

DeVry

The DeVry Corporation,
1286 Marianna St.,
Chicago, Ill.

Gentlemen:

Please send me without obligation a copy of "Motion Pictures in the School."

Name

Address

City.....State.....



SPENCER MICROSCOPE No. 64

with side-fine adjustment,
lever type, is

**An Ideal Instrument
For High School Use.**

Among its many advantageous
features are these:

- I. Objective lenses mounted directly into the metal mount, avoiding the use of Canada Balsam to hold them.
- II. Fine adjustment so constructed as to avoid breakage of cover glass when focused down upon it.
- III. A fool-proof fine adjustment, with 34 threads of the screw always engaged instead of but one, as in others.

CATALOG SENT
ON REQUEST.



MICROSCOPE No. 64 B
with 10X eyepiece, 16m/m and 4 m/m objective, double nose-piece, iris diaphragm. Complete in cabinet, \$64.00. Discount to Schools.



SPENCER LENS CO.

MANUFACTURERS
MICROSCOPES, MICROTOMES, DELIN-
EASCOPIES, SCIENTIFIC APPARATUS.
BUFFALO, N. Y.

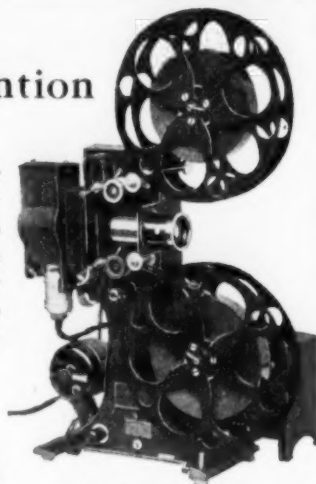


At the N.E.A. Convention In CHICAGO

the Victor Safety Cinema, using Safety Standard Film, was the only motion picture equipment allowed to operate in the Convention Hall. The same machine with the same security and the same perfect projection of the best educational films is available for your schools.

Our Libraries of Safety Standard Films

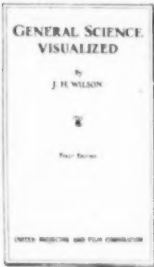
Our Libraries of Safety Standard Film are recognized as the leading source of subjects for visual education. Prices average one-half those of other exchanges.



The Victor Safety Cinema

Easy to operate, gives perfect results. Portable—can be used anywhere—no booth or experienced operator required. Price \$195.00.

Write for
this Booklet



Well-known schools in 310 cities supplement their courses in science, history and geography with our films regularly. Our 96-page Text Book, General Science Visualized, helps you plan your courses.

Send 25c in stamps for this book and get a free copy "Experimental Physics" by Professor Henderson of the University of Michigan, written to accompany his series of films.

Dept. C

UNITED PROJECTOR & FILM CORPORATION

69 W. Mohawk St. Buffalo, N. Y.

A Successful Modern School



© Keystone View Co.

The children in this school are alert, studious, interested. They are independent, resourceful, wise. Every lesson is real, because illustrated. They have and use the Keystone "600 Set" of stereographs and lantern slides. Would you make all your schools 100% efficient? Supply them with Keystone Visual Instruction materials. Let us help you.

KEYSTONE VIEW COMPANY, INC.,
Studios and Factories
MEADVILLE, PA.

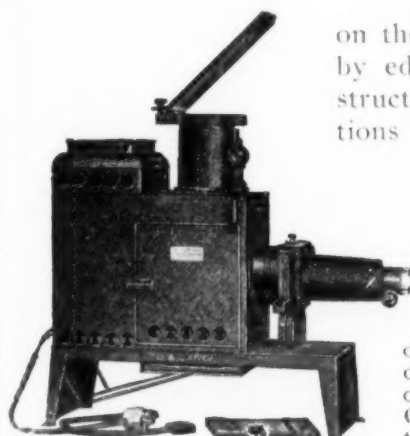
We have purchased the stereoscopic and lantern slide department of Underwood and Underwood.

The INFLUENCE of PICTURES



on the growing mind is recognized by educators. Combine verbal instructions with large clear illustrations projected on a screen by the

Bausch & Lomb BALOPTICON The Perfect Stereopticon



Photographs, maps, drawings, colored prints and specimens, in fact any opaque subject that will fit in the large object holder can be projected by the Combined Balopticon which also takes the regulation slides. With its powerful Mazda lamp, sturdy construction and ease of operation, the Bausch & Lomb Balopticon is the ideal projection lantern for schools.

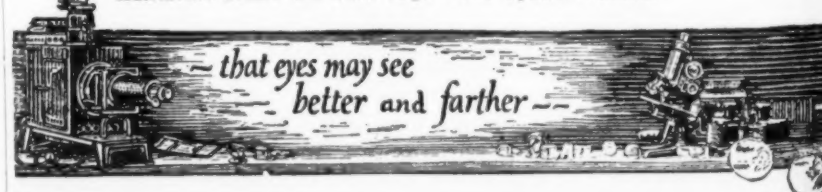
Ask your dealer, or write for descriptive literature and prices.

BAUSCH & LOMB OPTICAL CO.

551 St. Paul Street, Rochester, N. Y.

New York Washington Chicago San Francisco London

Leading American Makers of Photographic Lenses, Stereo-Prism Binoculars, Telescopes, Magnifiers, Microscopes, Projection Apparatus (Balopticons), Automobile Lenses and Other High Grade Optical Products.



OUR YEARS OF EXPERIENCE IN THE MANUFACTURE OF SCHOOL DRAFTING ROOM EQUIPMENT AND OUR CAREFUL STUDY OF THE NEEDS OF SCHOOLS IS AT YOUR SERVICE



Table No. 10

THIS is the most practical design for school drawing room use there is on the market. We have many modifications of this design.

WE can make any type of table or cabinet you may desire, and if you find none illustrated in our catalog we will be glad to quote you on special designs.



Table No. 7

WE HAVE A NEW CATALOG JUST OFF THE PRESS AND MANY STYLES OF TABLES ARE ILLUSTRATED

Write for **YOUR** Copy NOW

ECONOMY DRAWING TABLE & MFG. CO., ADRIAN, MICH.

COAL CONSUMPTION IN SCHOOLS.

Dear Editor:

In reading over the article "Some Phases of Planning and Installation of School Heating and Ventilating Equipment" in the January issue of the School Board Journal by Samuel R. Lewis of Chicago, Ill., there is a statement at the end of the article "A number of buildings have been equipped at an installation cost as low as nine cents per cubic foot, and have operated over long periods at around one-half pound of coal per season per cubic foot." The last part of the above sentence is apparently a mistake, at least from my experience covering a period of twenty-two years in this line of work. Take a typical classroom which measures 23 x 32 feet with a 13 foot ceiling. This gives a cubic contents of 9568 cubic feet divided by 2, as per his statement of a half pound of coal per season per cubic foot, makes a coal consumption of 4784 pounds. This is ridiculous on the face of it. Using the above an eight-room schoolhouse would only consume 38,272 pounds of coal per season or less than twenty tons. The average twelve-room residence without ventilation will run about twelve tons per season, with a good heating apparatus. I think this statement ought to be corrected. Some time ago the St. Louis school board told how they were using only about five tons per classroom per season and they were recirculating about 75% of the air. Everybody thought this was wonderful and how this man's apparatus gets by with less than two and one-half tons per classroom per season is beyond me. On a great many schools, that I have checked for coal consumption, I find that the coal used per season, runs closer to twelve tons per classroom per season.

C. W. MILLER,

President, Wisconsin Chapter of American Society of Heating and Ventilating Engineers.

Jan. 11, 1923.

TRIBUTE TO JOHN WANAMAKER.

The Philadelphia board of education, at its mid-December meeting, adopted the following tribute to the late John Wanamaker:

The Board of Public Education hereby records its deep regret at the death of the Hon. John Wanamaker, one of its members, on the morn-

ing of the 12th of December, 1922, in the eighty-fifth year of his age. John Wanamaker was appointed a member of The Board of Public Education on the 11th day of March, 1913. For more than nine years he gave diligent, unselfish and efficient service of great value to the cause of public education. He took up his work inspired by a firm conviction of the value of education to the perpetuity of our institutions and equipped with a wide and varied experience in public affairs. He had an instinct for progress and welcomed and wisely appraised new ideas. He had vision which enabled him to see clearly far into the future and imagination to construct for its possibilities with a courage which was not afraid. The cause of public education was near his heart and its advancement and improvement never seemed to escape his thoughtful attention. He was progressive but not rash, and conservative with open mind to new ideas.

For several years he was chairman of the finance committee where his successful experience in business was of inestimable value. In committee work his suggestions were always greatly appreciated and his advice gladly welcomed, but his interest in the public education system was not confined to this branch of the service. He was keenly alive to the other branches of the service and always revealed that he was intimately acquainted and closely identified with the progress of the work of the Board. He was deeply interested in the pupils and their progress and especially in the progress of those less favored because he knew well the trials they bore and the hopes that inspired them. No opportunity to aid or advance the interests of the teachers ever escaped him, and their progress in whatever direction was his sheer delight. They have lost a wise advisor and a sympathetic friend. His association with the other members of the board in the transaction of its business was thoughtful and kind and his unflinching courtesy in times of differences and stress attracted their admiration and increased their appreciation of him. The department of superintendence and the executive officers never failed to have his interest and his wise advice was always subject to their call. His passing away is deeply regretted by all the members who feel that they have lost a personal friend.

The Board of Public Education cannot fail to express to the city and to the state its appreciation of Mr. Wanamaker's invaluable services to both of them. The welfare of both was his constant care and his activities for the benefit of both were innumerable. With him it was a labor of love and his reward was the satisfaction of a duty well performed. The public school system of the city of Philadelphia and of the State itself have suffered a loss in his death that will be greatly deplored. He leaves to his family the priceless heritage of a noble life consecrated to every good work, which must be an inspiration and a blessing, and The Board of Public Education extends to them its heartfelt sympathy in this hour of bereavement.

SECRETARY DICK HONORED.

A warm tribute of appreciation was paid to William Dick, secretary of the Philadelphia school board, on January 6th, at the celebration of his sixty-fifth birthday. Following a mysterious invitation, Mr. Dick proceeded to the dining room of the Manufacturers' Club, where he was confronted with his friends and the entire administrative force of the public schools. During the evening the guests listened to speeches by well-known business and professional men of the city and educators connected with the schools. Mr. Rowen, president of the board of education, talked on phases of wartime problems, Mr. John D. Cassell, superintendent of buildings, told of the growth of the school system during his connection with the schools, and Mr. Edward Merchant recounted his experiences of 31 years, paying a feeling tribute to Mr. Dick for his judgment and constant encouragement toward cooperation. Judge Beeber referred to Mr. Dick's knowledge of hard facts regarding school conditions and his faithfulness to the work. Mr. Dick was congratulated upon the completion of 48 years of service for the schools of Philadelphia.

—Mr. John A. Guilford has resigned from the position of acting business manager of the Chicago board of education. Mr. Guilford who is 70 years old, has been with the board 54 years. Lack of harmony in the board and the burden of official duties are assigned as reasons for the resignation.

THE ANCHOR AND DOLPHIN



REPRESENTS THE Aldine Group of Textbooks

on READING, SPELLING, and LANGUAGE

*Why are these books giving such
eminent satisfaction the world over?*

NEWSON & COMPANY, Publishers

73 FIFTH AVENUE, NEW YORK

623 S. WABASH AVE., CHICAGO

REPORT OF THE N. E. A. LEGISLATIVE COMMITTEE.

(Concluded from Page 58)

complished through the operation of a law constructed according to the Towner-Sterling specifications.

I know full well that the Towner-Sterling bill itself again and again expressly provides that, in matters of control and supervision, the federal government is to exercise no functions whatever. I submit, nevertheless, that the bill doth protest too much, raising the suspicion in the mind of a normal man that here is a point of danger which the sponsors of the bill themselves recognize.

Again, in view of the fact that the federal government, in promoting vocational education through the Smith-Lever and Smith-Hughes acts, does exercise authority in administering them, one wonders if the Towner-Sterling bill, should it become a law, would not be so amended as to harmonize it with the other beneficent educational federal statutes.

Prudent Men Hesitate.

Prudent men having regard for the future, as well as the present, will hesitate to endorse the commission's views in this matter for even a superficially-informed student of government knows full well that no Congress is bound by the acts of former Congresses.

It is a very poor Congress that does not enact statutes, amending, perfecting, or destroying the laborious work of its predecessors. Now, has not the time arrived in the history of education in America for the rank and file, as well as the leaders who have a genuine interest in educational progress, to insist that assertion is not argument, and, therefore, to demand that time enough and care enough be taken for the fullest and freest discussion of the merits and demerits

of a legislative policy that may be proposed by any group of men, large or small?

Especially should this vigorous attitude of mind be maintained in these days, when it seems to be altogether the proper thing to "put over" schemes, either good or bad. He may be considered a great politician who is an artist in this business of "putting over things;" but schoolmen should think long and seriously before they surrender themselves to the domination of political spirit and the use of political methods.

I may not have the correct information; but I am under the impression that no legislative committee that has in recent years served the N. E. A. has included in its membership a single man who has opposed any part of the legislative program suggested by the committee as a whole. There may be nothing at all miraculous in such a condition; but it seems somewhat remarkable, to say the least.

Of one thing I am sure, that, from the labors of the commission, has not come that wisdom which results from a profound and unbiased investigation of the questions which should be raised in the minds of thoughtful persons by the several provisions of the Towner-Sterling bill.

This paper has already been protracted unduly, and I shall, therefore, now refrain from further comments upon the commission's report, reserving the privilege of submitting other observations at some time in the future. In closing the present article, however, let me say in all candor that nobody ought to question the patriotism of the commission or its devotion to the cause of public education. Both the commission and those who are not willing to support the Towner-Sterling bill, are seeking the same end, which is the promotion of intelligence and virtue throughout the land. Our goal is

the same; but just now we have not been able to come to an agreement as to the means by which that goal can best be reached.

WASHING FOREIGN FACES.

Laura Llewellyn, Little Rock, Arkansas.

Once it fell to my lot to teach a second grade in a school composed largely of Italians. The parents of these pupils were scarcely able to speak English and their homes were the kind that you hurriedly left after a brief visit. It is needless to say that the problem of cleanliness loomed large in spite of many schemes hatched to instill a love of water.

One day this plan popped into my head. After school I solemnly marched fifteen or twenty dirty youngsters into a hall, halting them near a wash bowl. With rag and soap (nowadays it would have to be rags and soaps to comply with up-to-date hygiene) I began removing some evidences of a week's neglect. With severe countenance I rubbed and scrubbed these startled little foreigners' faces till most of them burst out with bellowing lamentations. The secret of it all was I rubbed not gently but too well.

Did the plan work? It did. The next day the schoolroom fairly reeked with soap and water. Tony, the bad boy, actually smirked with pride entirely new to him as he presented a face entirely new to me. And Nettie's hair was combed! She burst into the room as the tardy bell was ringing, resplendent with clean apron, face aglow and her hair almost dripping with water.

"Nettie, Nettie, you are almost late."

"Can't help it teacher," gasping with half triumph in her eye, "my mother had to make my hair."

Modern Books on the Basal Subjects

LANGUAGE and GRAMMAR

Manly-Bailey-Rickert Lessons in English

ARITHMETIC

Watson & White's Modern Arithmetic

READERS

The Kendall Readers

HISTORY

Bourne and Benton's U. S. History

Revised to 1923

D. C. Heath & Co., Publishers

Boston New York Chicago Atlanta San Francisco

67 VOLUMES

THE NEW ECLECTIC CLASSICS

THE sixty-seven volumes of the Eclectic English Classics cover most of the books commonly read in Secondary School Work. The volumes are attractive in appearance, and durable in binding. They have been edited especially to meet the needs of Secondary Schools, by teachers with Secondary School experience. They are of convenient pocket size, and inexpensive.

Descriptive circular and price list mailed on request.

American Book Company

NEW YORK
CINCINNATI
CHICAGO
BOSTON
ATLANTA

330 East 22nd Street

CHICAGO, ILL.

"The More Carefully I Study It,
the Better I Like It.
It Is Different—"

—say prominent educators from every section of the United States who have examined OUR GOVERNMENT by Davis and McClure.

This textbook in Civics presents accurate data for a Course in Civil Government together with the essential activities of a Course in Applied Community Civics.

This book—NEW—but already used with such gratifying results that it can no longer be considered an experiment, is claiming your attention—and the attention of every one who is interested in BETTER CITIZENSHIP.

Ask for a
Copy for
Examination

LIDLAW BROTHERS

Educational Publishers

1922 Calumet Ave.
Chicago

130 East 25th St.
New York

J. B. LIPPINCOTT COMPANY'S Text-Books in Agriculture

ELEMENTARY SCHOOLS

DAVIS' PRODUCTIVE FARMING

This book is a model in text-book making. It has had many imitators but no successful competitors. It still leads.

HIGH SCHOOLS

DAVIS' PRODUCTIVE PLANT HUSBANDRY

A first year course for Smith-Hughes Schools. It contains the essentials of plant life, soils, small grains, etc. COOK'S APPLIED ECONOMIC BOTANY:—Free from the technicalities of classifications, it presents the subject from the standpoint of real life. WILLAMAN'S VOCATIONAL CHEMISTRY:—Combines all necessary material for Agricultural and Home Economics classes. DAVIS' HORTICULTURE:—Designed for short courses and for localities needing more work on the subject than is found in texts on general agriculture. MONTGOMERY'S FARM CROPS:—This may be used in High Schools needing more farm crop material than that given in most general texts.

COLLEGES

Our series of FARM MANUALS still lead as texts in the Agricultural Schools and as reference works in many high schools. 14 volumes.

LABORATORY MANUALS

Poultry; Feeding; Farm Crops; Dairying; Soils.

Let us know your needs and we gladly advise you regarding suitable texts. Circulars sent on request.

J. B. LIPPINCOTT COMPANY

Philadelphia
East Washington Sq.

Chicago
2126 Prairie Ave.

Standard Classic Readers

THEIR PLAN AND PURPOSE

The STANDARD CLASSIC READERS are especially prepared for use in the Fourth, Fifth, Sixth, Seventh and Eighth Grades. Each selection is particularly suitable for use in the grade intended. Introductions, biographies, notes, study helps and pronouncing vocabularies of proper names are given wherever needed.

This series contains among its selections material that enables the pupil to become familiar with those characters of fact and fiction most frequently occurring both in high school study and in reading after the years of school life.

Stories from the earliest known literature begin in the Fourth Year Reader and extend throughout the entire series, giving a brief but accurate record of history.

The Readers for the Fourth, Fifth and Sixth Years contain dramatic and dialogue readings; also selections for memorizing. This feature is unique and furnishes this material in compact and convenient form. The purpose of dramatic reading is to stimulate interest, promote correct enunciation, develop expressive reading, and, by allotment of characters to the children, to furnish a distinctive flavor to the selection which can be secured by no other means.

Because of the harmony of the plan, sequence of purpose, distinctiveness of organization and great diversity of content matter, the publishers of STANDARD CLASSIC READERS feel justified in offering this series to schools as one providing in one volume for each school year, at moderate cost, the entire gamut of basic and collateral reading needed.

FOURTH YEAR 60 cents	FIFTH YEAR 60 cents	SIXTH YEAR 60 cents
SEVENTH YEAR 80 cents	EIGHTH YEAR 80 cents	

EDUCATIONAL PUBLISHING COMPANY

Chicago

New York

Boston

A Contribution to Education and a Joy to Children

Geography for Beginners

By Edith Porter Shepherd, Principal of Warren
and Avalon Park Schools, Chicago

Texas has just made it a third grade basal adoption. Substantial recognition has come from practically every state in the Union.

The general opinion is voiced here:

"One of the most interesting books we have seen for a long time is *Geography for Beginners*. It is a text designed as an introduction to formal geography and to be used in third grade or even the fourth. It is written in short, clear sentences. It enables the child to see how life in his own home is related to that of the world beyond him and it shows him how people have used the earth and its products to make life pleasant for him.

The book is illustrated with attractive pictures, the type is large and easy to read. Each chapter closes with a list of 'things to think about and do.' Mrs. Shepherd has given us something new in this book for children and has made a distinct contribution to education and joy of children."

Virginia Journal of Education
Richmond, Va.

Send for descriptive folder with illustrated sample pages

Rand McNally & Company

536 S. Clark Street,

Chicago

Effective Expression

By

CHARLES ELBERT RHODES

Principal Bennett High School and Former Head of the
Department of English, Lafayette High School,
Buffalo, N. Y.

A new book on composition and rhetoric for high school classes and the first year of college, that is

INTERESTING

Richly and effectively studded with illustrative material chosen from 117 different sources from Homer to O. Henry.

A most complete text covering every vital process from "Getting Ready to Write" to "Literature—the Finished Product," with unusual emphasis placed on oral expression.

"Effective Expression" is the fruit of 15 years of teaching experience, a practical textbook that is inspirational.

Shall we send you descriptive material?

532 pages; attractively bound in cloth; list price, \$1.40

The Gregg Publishing Company

New York Chicago Boston San Francisco London

"We have used these pamphlets and textbooks for several years in connection with some of our work and have found them of great help."
Frederick W. Revels,
Dept. of Agriculture,
Syracuse University.



Send For These Two Catalogs

They contain a full list of all the pamphlet texts published by the International Textbook Company.

There are more than 2500 pamphlets in the series and they are used by over 350 schools and colleges in the United States and Canada, including the U. S. Military Academy, University of Pennsylvania, Columbia University, Los Angeles Board of Education, Catholic University of America, New York Board of Education, Brighton High School and the Kansas State Agricultural College.

More than \$2,500,000 has been spent in the production of these texts—more than \$100,000 is expended yearly in keeping them up to date. We believe they are the best and most authoritative texts for schools and colleges.

We shall be glad to send you the two catalogs illustrated above on request. Write, too, for a sample text. Please state the subject in which you are most interested.

INTERNATIONAL TEXTBOOK COMPANY
Box 8891, Scranton, Penna.

Rhyth
By
Price,
York,
This
folk d
lected
and S
fully
some
Ameri
and in
Silent
By
Buswe
Chicag
An
ments
in rea
sages,
ject n
readin
Machi
By
and H
illustr
Chicag
The
book f
taken
shop a
and h
involv
fined
With
they h
exerci
no th
range
The b
Textb
By
94 pag

At the N.E.A. Meeting Cleveland, February 26 to March 3

*new books and tests will be shown by
World Book Company at*

BOOTHS 16 AND 17
PUBLIC AUDITORIUM

Among the new tests will be the **Stanford Achievement Test** for grades 2 to 8 and the **Otis Self-Administering Tests of Mental Ability** for grades 5 to 12 and for college freshmen.

Dewey's Personal Shorthand, a new system for personal (not professional) use, and **Hetherington's School Program in Physical Education**, an N. E. A. report, will be among the new books.

Room 9-B-1 at the **HOTEL CLEVELAND** will be our reception room where you will be welcome at any time. Dr. Arthur S. Otis will be there to confer with you on any testing problems you may have.

World Book Company

Yonkers-on-Hudson, New York—2126 Prairie Avenue, Chicago

THREE EPOCH-MAKING BOOKS

The Mastery of Words

A SPELLER FOR GRADES 1 TO 8

By SARAH LOUISE ARNOLD

Book I, Grades 1 to 5, inclusive **Book II, Grades 6 to 8, inclusive**

A speller which is not lists of unrelated words, but a book which really teaches spelling, through sound, clever groupings, emphasis on the stumbling blocks, and intensive drill on words having the greatest difficulties.

THE MASTERY OF WORDS has had one of the greatest records of success of any text book on any subject in recent years. EIGHT STATES have adopted this speller in the past four years.

The Solution of the Spelling Problem

The See and Say Phonetic Series

By SARAH LOUISE ARNOLD AND OTHERS

These books standardize the teaching of phonetics in the Primary Grades. They are not readers, but they prepare for all reading, giving the child extraordinary ability to read any and all books fitted for his grade.

Howe's New Era Civics

By Dr. JOHN B. HOWE

THE BOOK OF THE HOUR

Replies to a questionnaire covering the whole subject of Civics, from the heads of the history departments in 653 high schools throughout the country, were of very great assistance to the author in preparing this book. The treatment is fresh, the style absorbing, and the book itself has the latest authentic data so essential in a subject where the facts of today may be out of date tomorrow.

IROQUOIS PUBLISHING COMPANY, Inc.

NEW YORK OFFICE
Columbia Trust Bldg.

HOME OFFICE: Syracuse, N. Y.

CHICAGO OFFICE
1811 Prairie Avenue

NEW BOOKS

Rhythmic Games and Dances for Children.

By Mrs. Florence Kirk. Cloth, 60 pages. Price, \$1.25 net. Longmans, Green & Co., New York, N. Y.

This book is a mine of helpful material on folk dances and games. The author has collected the music and words from old English and Swedish sources and has used them successfully in the school which she directs. While some of the games are not appropriate to American schools, many are decidedly quaint and interesting.

Silent Reading.

By Charles Hubbard Judd and Guy Thomas Buswell. Paper, 160 pages. The University of Chicago, Chicago, Ill.

An account of elaborate laboratory experiments to determine the adjustment of children in reading to (a) changes in the content of passages, (b) changes in their interest in the subject matter, (c) study as distinguished from reading and (d) reading of foreign languages.

Machine Shop Mathematics.

By George Wentworth, David Eugene Smith and Herbert Druery Harper. Cloth, 162 pages, illustrated. Ginn & Co., Boston, New York, Chicago.

The authors of this book have developed this book from a perfectly natural basis. They have taken the common operations of the machine shop as applied on the generally used machines and have observed the mathematical problems involved. They have stated the operations, defined terms and explained common practices. With the aid of the universally used formulae they have built on this broad basis a series of exercises and problems. The student thus gets no theoretical or useless material, but a wide range of practical, every day shop mathematics. The book is excellent in every way.

Textbook Selection.

By R. H. Franzen and F. B. Knight. Cloth, 94 pages. Warwick & York, Inc., Baltimore, Md.

This book is an interesting contribution to the movement for basing the selection of textbooks on purely objective factors and for eliminating the personal element so far as this is possible. The authors lay down the proposition that interest and comprehension are the two first factors of choice and that closely associated with these are the permanent value of the subject matter, the method of presentation and the mechanical excellence of the book. The method of applying these factors is explained by means of a score card.

As a means of making relative judgments the method suggested has undoubted merit. It has, however, this fault: A textbook could readily receive a high score in four of the five general considerations and be entirely unacceptable because it contains a single chapter or even a paragraph that makes it objectionable to an accepted principle of American government or offends an entire class of American citizens. Such texts are not unknown; in fact in a list of classics in English literature the authors include one work which is thus objectionable.

Municipal Bonds.

By Fraser Brown, 231 pages, leather bound. Published by Prentice-Hall, Inc., New York.

The author, who is a lawyer, and a student of finance, has prepared this volume with a view of providing necessary data and information to those engaged in the issuance of municipal bonds. The legal and financial phases are thoroughly defined and discussed. The sale and award of bonds, their status as an investment, their taxation and valuation come under careful consideration.

Junior Typewriting.

By Elizabeth Starbuck Adams. Cloth, 95 pages. Price \$1.00. The Gregg Publishing Co., New York, Chicago, Boston, San Francisco.

This is an elementary book in typewriting which is built around technical English rather than business forms. After providing a series of suggestions to the teacher the book introduces the student to the mechanical mysteries of a typewriting machine. Then follow a series of finger drills, word and phrase drills, shifting drills, etc., etc.

The work assigned to the student includes a well chosen variety of manuscripts covering not

only letters and telegrams, but also essays and poetry and the various forms of literature and writings likely to interest and concern a student.

Junior High School Writing Vocabularies.

By W. Franklin Jones. Cloth, 150 pages. Price 52 cents. Hall & McCreary, Chicago, Ill.

The lists are based on recent studies of vocabularies actually used by children of junior high school grade.

The Output of Professional Schools for Teachers.

By Charles E. Benson. Cloth, 88 pages. Warwick & York, Inc., Baltimore, Md.

This is a study designed to show what kind of schools teacher graduates enter first after graduation, what types of schools that are served, what constitutes the common period of service, and what becomes of those who do not enter the teaching profession. The book is liberally provided with tables of statistics and with graphs.

The author reaches some interesting conclusion and provides some valuable suggestions. He notes that the median tenure of the teaching population is four years and that of the rural teacher two years. His suggestions, which constitute the final chapter, apply to institutions, taxpayers, teachers, pupils and to service.

Otis Self-Administering Tests of Mental Ability.

By Arthur S. Otis. Consists of Intermediate Examination: Forms A and B, Higher Examination: Forms A and B, Interpretation Chart with Percentile Graph, Class Record, Manual of Directions and Key. Price \$1.10 per package. World Book Co., Yonkers, N. Y.

Here is presented a series of tests designed for the range of grades of from four to twelve and for college freshmen. The higher examination is designed for grades nine to twelve and college freshmen and the intermediate examination for grades four to eight.

The new features which the author has introduced cover (1) self-administration, (2) ease of scoring, (3) flexible time limit, and (4) variety of test material. The forms are accompanied by directions and key.

Treasure Island.

By Robert Louis Stevenson. Edited by Max J. Herzberg. Cloth, 297 pages. Price, 60 cents. Houghton Mifflin Co., Boston.

TEACH THE PUPIL HOW TO THINK

Teach him the ALEXANDER-DEWEY way:

The *Alexander-Dewey Arithmetic* with its socialized, dramatized recitations, stimulates the pupil to self-activity. Most of the carefully graded lessons can be worked out by the pupil alone. Hundreds of problems of contemporary interest; quantities of oral lessons and reviews. **2, 3, and 6 Book series.**

Teach him the HORACE MANN way:

The *Horace Mann Readers* appeal to the interest and imagination of pupils of all grades, and tend to and *New First Readers* are the latest additions to the develop independence in reading. The *New Primer* series. They contain new material in story form, with colored pictures of unusual merit. Teacher's Editions.

Teach him the WOODBURN & MORAN way:

Woodburn and Moran's Histories make a personal and dramatic appeal and foster a real love of history. Authentic, impartial, and inspiring. Beautifully illustrated. Many pupils' and teachers' aids.

The Makers of America (5th Grade).

Introduction to American History (6th Grade).

Elementary American History and Government (7th and 8th Grade).

LONGMANS, GREEN & CO., Publishers

New York: 55 Fifth Ave.

Chicago: 2457 Prairie Ave.

HISTORY MAPS

*A New Series of
Forty-four Large Maps
Size 50x38 inches, Edited by*

**WEBSTER
KNOWLTON
HAZEN**

Three well known historians have by their combined efforts enabled us to produce a series of maps of outstanding effectiveness as a "teaching tool" for

**ANCIENT AND MEDIEVAL AND
MODERN EUROPEAN HISTORY**

Full information in booklet No. A123

FREE ON REQUEST

A. J. NYSTROM & CO.

Publishers of Better School Maps

2249-53 Calumet Ave.

Chicago, Ill.

It has been remarked by an English critic that *Treasure Island* best represents the transparency of English words. No boy who once gets into this classic story of adventure remembers Stevenson's language. He rather lives through the adventures of the evil group on its voyage and search for the treasure. The language itself is so thoroughly adapted to the story that the boy entirely forgets it.

The present edition is in the style of the *Riverside Literature Series* and contains a splendid introduction, including a biographical sketch of Stevenson and an appreciation of his work.

Introduction to the Theory of Educational Measurements.

Walter S. Monroe. Cloth, 8 vo., 364 pages. Price \$2. Houghton Mifflin Co., Boston, Mass.

Of the many additions to educational practice during the past two decades none has been more hopeful, more specifically helpful, or more quickly understood and accepted than the "standard" tests of intelligence and achievement in the common subjects. The teacher, the supervisor, the administrator, and the scientific student of education have found in them the single means of removing guesswork in teaching, in supervision, in administration. Through these tests they have been enabled to substitute scientific, objective accuracy in determining the native ability of children and measuring the amount and quality of instruction which they have received.

The present book is a study of educational tests from the standpoint of the fundamental theory which underlies the construction, use and interpretation of these tests. It begins quite naturally with a brief historic sketch of tests and gives due credit to the several pioneers in this field in the United States and Europe. And it should be added here, parenthetically, that the bulk of the pioneering in educational test construction has been the work of American educators. The author then passes from a statement of the need and use of tests to a general discussion of the common and varying purposes of tests, the common and special means employed to attain these purposes, and the technique of recording findings. The special problems of quality tests, as distinguished from

accuracy tests derived scores, through which some comparison may be made of tests having different units and bases; norms and their uses; the criticism of tests; the principles of using tests and the introduction of remedial measures; the statistical problems of testing, and of utilizing these findings—these are subsequent topics treated quite comprehensively. For the average school administrator the chapter devoted to a critical study of a test will perhaps be the most useful as outlining a type of investigation which he should engage in before accepting a test or series of tests for his school system.

The book is a decided advance in the literature on testing because it presents so thoroughly and correctly the assumptions and facts upon which tests are built, the methods used to develop and perfect them, the principles of using tests for bettering instruction, and the mechanics of recording and interpreting the facts resulting from tests.

Body Mechanics and Health.

Leah C. Thomas and J. E. Goldthwait, M. D. Cloth, 16 mo., 112 pages. Price, \$1.25. Houghton Mifflin Co., Boston.

The important relation of correct posture to health is made clear in this useful book. The authors write from long experience in handling children and directing classes in physical education and suggest a definite series of exercises intended to develop the body and to emphasize right posture in work, play, and rest. Many of the exercises are corrective in purpose, and serve as well for preventives.

Alaska: The American Northland.

By Isabel Ambler Gilman. Cloth, 251 pages, illustrated. Price \$1.40. World Book Co., Yonkers, N. Y.

A teacher who knows and loves Alaska and who has a wonderful gift of telling what she has seen and heard in a graphic way has prepared this supplementary reader on the American Northland. The book sets a new standard for geographic readers and deserves wide spread study among American schools. It tells the story of two American children who make a trip through Alaska with their parents and who learn about the life, the resources, the industries, the schools, and the history of the vast

territory of Alaska. Many of the facts presented are startling even to the teacher of geography, who thinks she knows something about Alaska.

The Story of Young George Washington.

By Wayne Whipple. Cloth, 256 pages, illustrated. Henry Altemus Co., Philadelphia, Pa.

There are probably no two figures in the history of any country that serve in a more inspiring manner as examples for the modern youth than those of Washington and Lincoln. Their characters exemplify above all things love for truth and honor.

The author in telling the story of George Washington proceeds upon the thought that the youth should know the boy and the man rather than the soldier and statesman. "It is not a history of the General or the President," he says, "it is a life of George as well as of Washington."

Space is given to the ancestors of Washington, his life as a little boy as well as a big boy, and the atmosphere in which he lived, as well as to the achievements of the man. The book is embellished with eight colored illustrations.

A directory of Local Child-Health Agencies in the United States has been issued by the United States Department of Labor (Bureau Publication No. 108). The directory is arranged in (1) agencies by state and city, (2) in an alphabetical list by states of agencies serving state-wide areas, county-wide areas, urban areas, and both by county and urban areas. The classifications cover maternity, infant and pre-school care.

SALARY AND SERVICE.

I am willing to pay a good salary to the teacher; in fact, be liberal with them, but on the other hand demand quality.

We have too many frail diminutive, listless looking teachers to suit me. So many lack force of character. They fail to impress the student with anything worth while. They are teaching because they have nothing else to do.—Dr. Ralph A. Light, President, Board of Education, Chanute, Kansas.

Strong, Durable, Economical Educational Re-binding

*Boards of Education, Colleges, Etc.,
Please Note*

Do not discard valuable books. Send them to The Educational Bindery Company, and be convinced it pays to re-bind.

Our Specialty—The re-binding of School and College Text Books, Hymnals, Law Books, etc., in Cloth and Buckram, with well printed titles.

Good binding at a reasonable price.

We are one of the oldest established School Book re-binders in the country. Our workmanship and prices are in a class by themselves.

We re-bind three to four books for the net cost price of one new copy. Send a list showing quantity of each item you contemplate re-binding and we will quote prices promptly.

If you wish a sample of our work send us any school book and we will re-bind it free of charge.

The Educational Bindery Company

Not Inc.

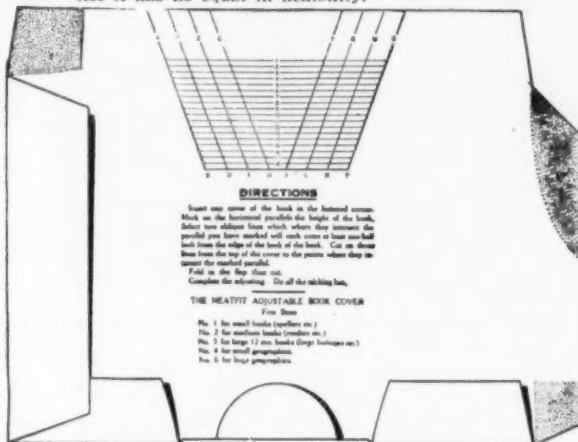
1126 Warren St.
EVANSTON, ILL.

Eight Important Reasons for Selecting the NEATFIT ADJUSTABLE BOOK COVER

(PATENTED)

For All Your Textbooks

- ONE: It is made of a single piece of the highest grade stock which is tough as cloth, outwearing three ordinary covers.
TWO: It is cut and folded true and exact.
THREE: It is easily and quickly adjusted and fastened.
FOUR: It has broad gluing surfaces of sanitary glue which do not come loose.
FIVE: It is absolutely waterproof.
SIX: It fits snugly and presents an unbroken surface.
SEVEN: The patented device for adjusting the covers saves much time, enabling the pupils to do neat work in fitting the cover.
EIGHT: Considering its remarkable strength and adequate wearing qualities it has no equal in flexibility.



NEATFIT ADJUSTABLE

"The Best Book Cover ever made for School Use."

MILLIONS of the NEATFIT ADJUSTABLE BOOK COVERS ARE SOLD EACH YEAR

If you are not acquainted with the Neatfit Adjustable Book Covers we shall be very glad to send samples for your consideration. If you call for bids kindly send us your specifications.

IROQUOIS PUBLISHING COMPANY, Inc.

New York Office
358 Fifth Ave.

Home Office: Syracuse, New York

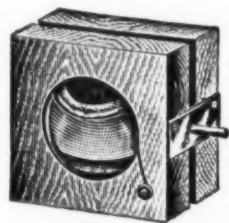
Chicago Office
1811 Prairie Ave.

The Neatfit Adjustable Book Cover Will
Increase the Life of the Textbook 50%

RADIO SUPPLIES



Vacuum Tubes.



Variometers.



Variocouplers.



Head Phones.

Vacuum Tubes, Variometers, Variocouplers, Loud Speakers, Transformers, Batteries, Rheostats, and all essential parts carried in stock.

Send for Catalog No. 22B

E.W.A. ROWLES CO.

MANUFACTURERS
SCHOOL FURNITURE AND SUPPLIES
2345-51 SO. LA SALLE ST.
CHICAGO, ILL.

349 Words a Minute In Isaac Pitman Shorthand

THE SYSTEM OF CHAMPIONS

Nathan Behrin smashes his own record of 322 words a minute and also wins NEW YORK STATE CHAMPIONSHIP at speeds of 250 and 300 words a minute. John F. Daly, also an Isaac Pitman writer, was second.

New York State Championship

250 and 300 words a minute for five minutes

Name	System	Accuracy
Nathan Behrin	Pitman	99.64%
John F. Daly	"	98.44%
Jerome Victory	"	98.21%
Solomon Powsner	"	98.11%
R. F. Martin	"	97.42%
Neale Ransom	"	96.76%

Two Minute Sprint Contest

350 words a minute

325 words a minute

Name	Errors	Name	Errors
Nathan Behrin	3	Nathan Behrin	2
John F. Daly	3	Neale Ransom	8
R. F. Martin	3	Jerome Victory	11
Neale Ransom	7	John F. Daly	14
Jerome Victory	7		
Solomon Powsner	23		

Mr. Behrin's achievement is another victory for Isaac Pitman shorthand, the system which is based on scientifically correct principles. Pitman shorthand is used by all Congressional and more than 90% of all court reporters. Over 93% of the New York City day and evening high schools teach Isaac Pitman shorthand.

ISAAC PITMAN & SONS

2 WEST 45TH STREET

NEW YORK



ARE YOU THROWING AWAY SCHOOL FUNDS?

Many school authorities wait until the last moment before planning the arrangement of their science laboratories. Plans should be made and plumbing installed before the floor is laid in order that gas and water pipes can be accurately and economically attached to the tables. From the above cut you can visualize what must be done.

Mail us floor plans or rough sketches of the rooms you are planning to equip and let us show you the selection and arrangement of furniture which we would recommend from our twenty-four years' experience in manufacturing science laboratory and vocational school furniture. This service is rendered free by our Advertising Department. Our catalogue sent free on request explains this service fully and contains many helpful suggestions.

E. H. SHELDON & COMPANY

Oldest and Largest Producers of
Manual Training, Cooking, Sewing, Drawing, Art, and Science Laboratory Furniture
MUSKEGON, MICH.



LABORATORY APPARATUS and EQUIPMENT

FOR

Physics, Chemistry, Biology and
Agriculture.

Visiting superintendents judge
your school by—what?

What part does a *well* equipped
laboratory play in the efficiency of
your science courses? What part,
in the estimate other educators
form regarding *your* methods and
efficiency?

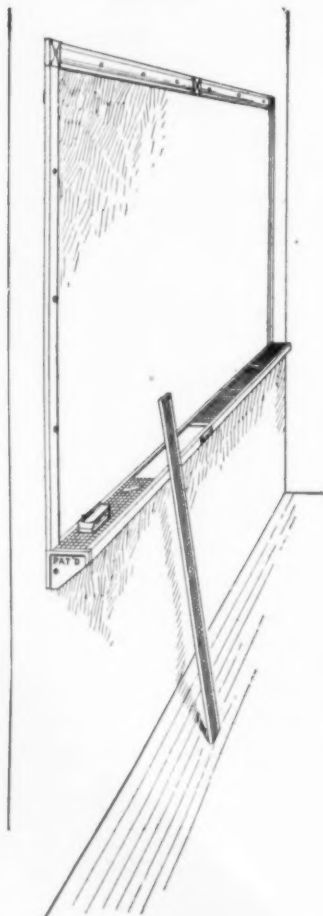
The number of High Schools
and Colleges which SCHAAR &
COMPANY equip, has more than
doubled in the last two years. Isn't
this a proof of satisfied customers?

Let SCHAAR & COMPANY
equip *your* laboratories. Send for
catalog 5B.

SCHAAR & COMPANY

556 West Jackson Blvd.
CHICAGO ILLINOIS

"Dudfield's System of Dustless All Metal Crayon Troughs and Metal Blackboard Trim



Protect the health of
your teachers and pupils
by eliminating that dis-
agreeable chalk dust so
injurious to health by
the use of our patented
DUSTLESS ALL
METAL CRAYON
TROUGHs with METAL
BLACKBOARD TRIM.

The metal dust tray
with wire eraser cleaner
is removable for cleaning
and is furnished for
metal or wood trough
construction, and is made
in 4 foot sections.

Samples and descrip-
tion in detail will be fur-
nished on request.

Dudfield Manufacturing Co.
Liberty, Mo.

NATIONAL DUSTLESS CRAYONS CRAYONS OF CHARACTER

When you finger a National made
crayon and apply it to a writing surface
you are at once conscious of the ease
with which it glides along.

National Crayons are free from grit and write perfectly.
Being dustless makes NATIONAL the ideal crayon for
the classroom.

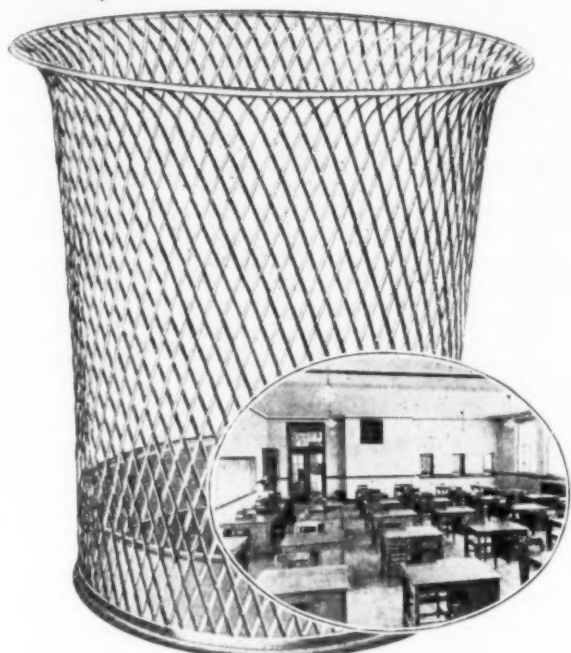
Specify NATIONAL DUSTLESS CRAYONS through
your supply dealers.



THE NATIONAL CRAYON CO.
WEST CHESTER, PA.

Approved by the School Boards of Many of America's Leading Cities

Nemco Made of
Expanded Metal
—Not Wire.



NOTE THE STEEL COLLAR.

THEIR problem, even as yours, was to find a "child proof" basket. They required a basket so strong that it would withstand the hard usage of the classroom without bending out of shape, rusting or the bottom coming loose.

They found it in the NEMCO.

The NEMCO (made of Expanded Metal—Not Wire), has the requisite strength, durability and big capacity. Its staunch workmanship and neat enameled mahogany or olive green finish makes it attractive. The solid steel collar which prevents small waste from sifting out is a valuable feature exclusive to it.

In addition the NEMCO is moderately priced. Isn't this the kind of waste basket that you are looking for?

Shall we send descriptive literature?

NORTH WESTERN
EXPANDED METAL CO.

1214 Old Colony Building

CHICAGO

INTELLIGENT BUYING BY SCHOOL BOARDS.

(Concluded from Page 50)

to send representatives, quote prices and comply with all the requirements of the board for the purchase of the equipment. The bids are opened on the date specified and the board suddenly announces that the letting will be postponed for thirty or sixty days. This action has been taken by the board of education with no other purpose than to get a line on the prices that will be quoted and to secure some special advantage at the expense of the bidders.

When the second letting date is called, the various school supply houses must go through all the trouble and expense of a second call. We maintain that such action on the part of a board of education is unfair and unjust and that eventually this unnecessary overhead expense must be paid for by the board of education.

Business Houses Study the Needs of School.

We call attention to the fact that there are numerous heads of school supply houses who have devoted a life time to the careful and proper equipment of the schools of this country. They employ experts at high salaries to study the needs of the schools and to keep in touch with modern methods of instruction, and who plan and design the necessary equipment for the practical needs of the most modern school. It is necessary that this work be done by some agency and it can be better done by the manufacturers and distributors of school equipment than by anyone else.

As a rule, boards of education would do well to place their business in the hands of a reputable and honorable school supply house and to rely upon the honesty and good judgment of

such a house to meet their requirements in the way of furniture and equipment. The nearness of these houses to the place where the equipment is to be supplied is often an advantage. They must depend upon the board of education for all future trade and even though they were inclined to deal unfairly with the board of education, from a financial standpoint they could not afford to do so.

The experience, the training and the knowledge of the needs of the modern school possessed by a reputable school supply dealer are a great asset to the schools themselves. If the advice and suggestions of the school supply man were requested more often in conventions of teachers and other school workers, the schools would gain thereby many helpful suggestions that would add greatly to the efficiency of the school.

CONSOLIDATING THE SCHOOLS OF AN ENTIRE COUNTY.

(Concluded from Page 54)

provide for increases in enrollment at the respective schools or for unexpected influxes of people. The schools are an interesting illustration of consolidation and transportation on a county-wide basis.

A STUPENDOUS SCHOOLHOUSE PROBLEM.

(Concluded from Page 61)

49. Conveyed to Deputy Superintendents.
50. Notice to the contractor to begin work.

Here Mr. Snyder adds:

"It must be quite clear that private work parallels but a very few of the fifty items or steps and duplicates only about five. Moreover, in private practice the award may be made as may seem best, not of necessity to the lowest bidder, but to any bidder or to none at all, the job being simply given out on some form of a

cost plus basis. Speed in construction then becomes only a question of expenditure of funds. The same elaborate procedure must be followed in connection with all contracts for equipment, for maintenance, for fire protection and for every job for which the estimated cost is \$1,000 or more.

The fire prevention task in itself is an important one. In 1904 the school board appropriated \$300,000 for fire escapes and \$550,000 for permanent betterments. This year another grant of \$500,000 for the same purpose was made. In 1919 there were twenty eight fires, loss \$12,700; in 1920 43 fires, loss \$20,070; in 1921, 39 fires, loss \$21,022.

AKRON BUILDING PROGRAM.

—A comprehensive building program was presented to the school board of Akron, O., by Supt. C. R. Reed at the meeting held on October 3. The recommendations included six suggestions:

1. That an auditorium and gymnasium be added to the Crosby building and that the old part of the building be rebuilt to remove the fire danger and to provide adequate lighting and heating.
2. That the gable roof on the Lane and Howe schools be replaced by flat roofs.
3. That the plans for the new South High School be begun at once.
4. That an addition be made to the Findley School, to include an auditorium and gymnasium.
5. That the Forest Hill School be provided with an addition.
6. That the board adopt as its policy, the remodeling of one old building each year.

Tribute to a School Janitor.

—A bronze tablet has been placed at the Carmel high school, Hamilton County, Indiana, in memory of Levi Evans, a "good school janitor." His helpfulness to pupil and teacher, and uniform courtesy and kindness won for him the highest respect of the school and the community.



"ARTISTA" WATER COLORS
For Encouraging Native Talent

Ruskin has said that it is the duty of the schools to discover for the world any latent art talent in a community. Art teachers in America are doing a noble service in the matter of encouraging and helping such talent.

In the practical drawing and design problems the talented, as well as the less gifted, will find "ARTISTA" WATER COLORS an encouraging medium. Permanency of color and even flow on paper are two essentials in water color. "ARTISTA" possesses these and a number of other features which we shall gladly tell supervising officers. "CRAYOLA" CRAYONS will satisfy budding art talent in the lower grades.

LECTURERS CHALKS will help teachers in interesting pupils on the blackboard. Let us send you a brochure on this subject.

BINNEY & SMITH CO.
Makers of
GOLD MEDAL CRAYONS
"ARTISTA" WATER COLORS

41 East 42nd St. New York



Erasers For Your School Work



One-half Actual Size



Actual Size



Actual Size

NEATNESS is one of the prime essentials in school work and yet "to err is human"—especially among young pupils.

Eberhard Faber erasers will help to correct mistakes and still leave the paper clean, unscratched and as neat as if the erasure had never been made.

There is an eraser for every purpose. Those shown here are best for school work.

Send for samples and further information.

EBERHARD FABER

"The Oldest Pencil Factory in America"
37 Greenpoint Avenue, Brooklyn, N. Y.

HOW SHALL HIGH SCHOOL GIRLS DRESS?

(Concluded from Page 36)

Thereafter we had very little trouble getting the girls to wear them. One pretty little junior to whom I spoke last year when I asked her how she liked her uniform replied: "I do not wear my uniform Saturdays or Sundays, but I am always glad to get into it again on Monday." This little lady could have had any kind of a dress she wanted.

We hear nothing but compliments for the girls, where the poorest girl looks as well dressed as the richest. We have had letters from nearly all parts of the United States making inquiries about our success with the idea. The girls have entered contests in other towns with other high schools. Their dress is always much admired. The superintendent and teachers feel that it has been a very great influence for good on the girls themselves.

I wish all the mothers of our land might see our girls as they march out dressed in their uniform. It makes the plain girl look pretty and it certainly enhances the beauty of the more fortunate girl.

Our uniform is a dark blue serge skirt plaited, reaching within fourteen inches from the floor. White cotton regulation middie with blue wool collar and cuffs trimmed with white braid. They wear the large silk ties usually black, and black or brown leather shoes with low heels.

AN EDUCATIONAL TRAGEDY AVERTED.

(Concluded from Page 42)

ing in the direction of the boxes occupied by the objectors. It is alleged that it was agreed that certain outlying districts should be allowed to withdraw next April and that a proposed bond issue should be called off; it is alleged that in return the objectors agreed to drop their right of appeal to the supreme court. Reas-

sured by a huge note underwritten by a long list of prominent citizens, the banks took up the outstanding anticipation warrants and after sixty-five calendar days of silence, the bell again began to ring, and the cat—O, well! A cat has nine lives, you know.

Conclusions and Deductions.

The writer cannot close without registering a protest against allowing objectors to withdraw from school districts because they object to the amount of school taxes levied. In this state, at least, the high limit of school taxes is a starvation limit as far as a populous district is concerned. How often must we reiterate, *the perpetuity of the nation depends on an educated citizenry!*

The only question that should be raised by objectors in a consolidated district is: Does the child in the outlying parts of the district have equal educational opportunities with the child residing in the center of population? If we allow that a patron of a school district has a right to withdraw therefrom because he thinks school taxes are too high, then every school district in the United States would be immediately disrupted.

SCIENTIFIC SCHOOL SUPERVISION.

(Concluded from Page 44)

phonics or reading. He was examined May, 1921, by Gray's Oral Reading test and scored 27½. He was placed in a special phonetic group and given constant drill. He was also given primer reading to do. He gradually grasped the phonics and was able to go from a primer into a first reader, later into a second reader. When tested by Dr. Wilgus in Jan., 1922, he was found to have an I. Q. of 88 almost normal. He is now doing 3A work and can read in that reader very well.

Aubrey ten years three months, in the 2A grade, was presented to Dr. Wilgus for examin-

ation. He was found to have an I. Q. of 81. He was retarded one year in 1B, one and one-half years in 2A. He had not been able to make a score in the Gray's Oral Reading Test in May, 1921. He was given special help by his room teacher and the unassigned teacher. His progress was very slow, so it was decided to start him all over again on a new system of phonics—namely The Beacon. In January, 1922, he was given Gray's Oral Reading Test again and scored 21¼ against a standard of 43 for 2A. He has taken hold of his work so well and is now interested in doing all he can to get ahead. His discipline is no longer a problem. He is doing 3B work and promises results that will no longer require the time of the unassigned teacher.

The foregoing are "merely illustrations of what careful measurements will do. Such illustrations could be multiplied many times. In Rockford, we are finding that it pays to measure. Furthermore, we are finding that our teachers and principals welcome objective measures of their work. We are presenting the results of these measures to parents individually and occasionally at parent-teachers' meetings. It is our hope to ultimately devise a special report card that will inform the parents of the standing of his child according to these objective units. It takes a little time and it takes a little money but ultimately it saves both time and money. Unfortunately these standard units are as yet lacking accuracy but that is a matter that will be corrected as time goes on.

It took many hundreds of years to perfect the units of measure that we now commonly use. Let us give this new movement in education our heartiest support and in time we will really have a science and a technique of measurement that will be a substitute for inaccurate opinion and comparison.

EAGLE'S 7 MOST POPULAR SCHOOL NUMBERS



Every day in
every way
Eagle Pencils
are better
and better.

245 EAGLE ALPHA EAGLE PENCIL CO. NEW YORK

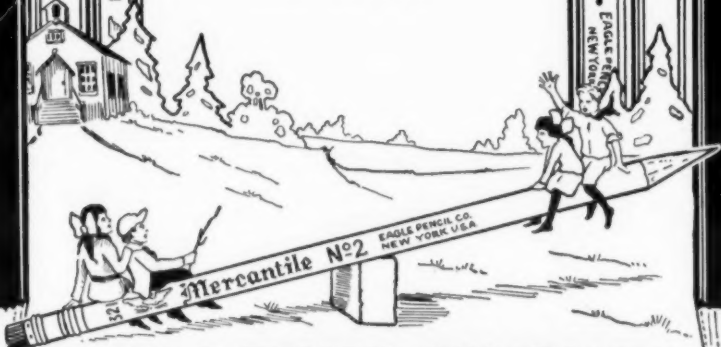
122 SUN No. 2 EAGLE PENCIL CO. NEW YORK USA

HB The Scholastic EAGLE PENCIL CO. NEW YORK

EAGLE PENCIL CO. NEW YORK USA

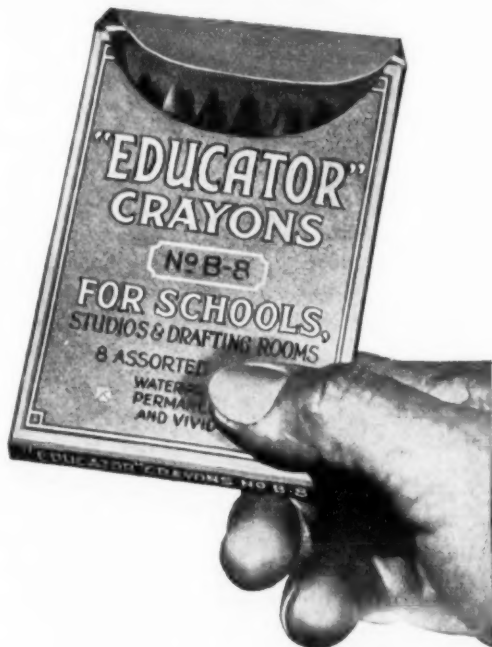
EAGLE PENCIL CO. NEW YORK USA

283 EAGLE PRACTICE EAGLE PENCIL CO. NEW YORK USA



EAGLE PENCIL COMPANY
NEW YORK USA

SPECIFY



B-8, 8 Assorted Colors
B-12, 12 Assorted Colors
B-16, 16 Assorted Colors
B-24, 24 Assorted Colors

Superintendents, Principals and Teachers:
Send for Free sample box.

JOSEPH DIXON CRUCIBLE COMPANY
Pencil Dept. 31 J.
Jersey City New Jersey

THE APSCO LINE

Sharp-Pointed Pencils In Every Class Room

SHARP-POINTED pencils are now the rule rather than the exception in most class rooms. The former laborious, dangerous method of sharpening pencils not only consumed time, but was unclean, and poor results were obtained. Now, progressive schools use

APSCO

Pencil Sharpeners

—each pupil's pencils are sharp-pointed and neater work results.

Eleven different models of Apsco Pencil Sharpeners enable each school to select the model particularly suited to its need. Three models are of all-steel construction and all are equipped with twin milling cutters of solid steel.



The GIANT

The most inexpensive Apsco model sharpening pencils and crayons of all sizes. Twin milling cutters of solid steel; shaving receptacle of transparent or colored celluloid. Colored receptacle conceals accumulation of chips and graphite. Adjustable to any position.

Send for literature illustrating and describing the Apsco Line.

Automatic Pencil Sharpener Co.
1309 Garland Bldg., Chicago

Apsco Pencil Sharpeners are displayed and sold by leading school supply houses and stationers.



For more than fifty years Spencerian Steel Pens have been the standard among better schools. They outwear any two ordinary pens. Children quickly learn the art of good penmanship when they are given these smooth-writing, long-wearing pens for their work.

Samples of all school pens are furnished to school superintendents and teachers on request. Supplies may be obtained from the trade.

SPENCERIAN PEN COMPANY
349 Broadway, New York

No. 1—College, fine point; double elastic.
No. 2—Counting House, excellent for bookkeeping.
No. 5—School, fine point; semi-elastic.
No. 47—Intermediate, medium point; stiff action.

No. 2

Spencerian School Pens

Standard Test Goals

Frank E. Alsup, Superintendent of Schools, Frontenac, Kansas

For nearly two years we have been giving standard tests at regular intervals and find them very helpful. One of the problems we face in giving them lies in making a careful comparison of our results of one month with the standard results of another month. For example, the Haggerty reading tests are standardized for May of each year and we give this test in another month and wish to know whether our children are meeting the standards set by thousands of children. Again, the May Ayres Burgess reading tests are standardized for February and a school gives P-1 in, say September, P-2 in December, P-3 in February, and P-4 in May and wishes to know where its students stand in each test. The Luncford number tests are standardized for May; the Courtis arithmetic tests for September, November, February, and May; the Courtis spelling tests for September, February, and May; and the Courtis handwriting tests for February and May. Similar problems arise in giving other standard tests and comparing results with standard scores.

It is my purpose to construct a table that will give a standard score for each grade for each month of the school year. In making this table the standard scores as given by the publishers of the tests are first located at their proper places in the table. Then, the difference between this score and the following or preceding score is found and this difference is prorated to the intervening months; for example, in handwriting the third grade February standard is 197 and the May standard 290, their difference is 93 and the intervening period is three months, hence each month receives one-third of this difference. Thus, adding 31 to 197 gives 228 for the March standard, and 31 to 228 gives 259 for the April standard, and so on.

It will be observed that one assumption is made; viz, each month receives its share of the advance. This assumption seems sound, because as children attend school month after month they advance in the work of the school. The so-called "plateaus" and "slumps" of individual children in the long run fit into this assumption.

The table follows:

Grade	Month	Reading		Arithmetic				
		Haggerty Sigma 1		May, Ayres, Burgess	Luncford	Courtis Card Cabinet	Courtis Spelling	Courtis Handwriting
		Test 1	Test 2					
ONE	Sept.	3	2		6-10			
	Oct.	9			12-10			
	Nov.	12	5		18-10			
	Dec.	18	9		24-10			
	Jan.	22	11		30-10			
TWO	Feb.	25	13		36-10			
	Mar.	31	14		42-10			
	Apr.	35	16		48-10			
	May	40	20		54-10			
	Sept.	49	27		6-5		319	
THREE	Oct.	57	33		12-5		345	
	Nov.	66	40		18-5		370	
	Dec.	75	46		24-5		398	
	Jan.	84	53		30-5		424	
	Feb.	93	60		36-5		450	
FOUR	Mar.	102	66		42-5		491	
	Apr.	110	73		48-5		531	
	May	120	80		54-5		572	
	Sept.	124	87	3.90	6-4		423	154
	Oct.	129	93	4.12	12-4		465	162
FIVE	Nov.	134	100	4.34	18-4		507	171
	Dec.	138	106	4.56	24-4		549	178
	Jan.	142	113	4.78	30-4		591	183
	Feb.	146	120	5.00	36-4		633	197
	Mar.	150	127	5.22	42-4		643	228
SIX	Apr.	155	133	5.44	48-4		653	259
	May	160	140	5.67	54-4		663	290
	Sept.	164	144	5.89	6-3	129	555	296
	Oct.	169	149	6.11	12-3	339	577	302
	Nov.	173	153	6.32	18-3	550	599	308
SEVEN	Dec.	178	158	6.54	24-3	679	620	314
	Jan.	182	162	6.76	30-3	744	642	320
	Feb.	186	166	7.00	36-3	407	664	325
	Mar.	180	170	7.12	42-3	577	690	346
	Apr.	195	175	7.24	48-3	748	716	367
EIGHT	May	200	180	7.37	54-3	918	742	388
	Sept.			7.49	6-2	627	608	399
	Oct.			7.61	12-2	723	627	410
	Nov.			7.73	18-2	819	646	421
	Dec.			7.85	24-2	915	665	432
NINE	Jan.			7.97	30-2	1011	685	443

Grade	Month	Reading		Arithmetic				
		Haggerty Sigma 1		May, Ayres, Burgess	Luncford	Courtis Card Cabinet	Courtis Spelling	Courtis Handwriting
		Test 1	Test 2					
SIX	Feb.	8.00	36-2			1107	704	462
	Mar.	8.12	42-2			417	715	474
	Apr.	8.24	48-2			672	726	496
	May	8.37	54-2			727	748	518
	Sept.	8.49	6-1 1/2			490	707	529
SEVEN	Oct.	8.61	12-1 1/2			630	720	540
	Nov.	8.73	18-1 1/2			770	733	551
	Dec.	8.85	24-1 1/2			715	746	562
	Jan.	8.97	30-1 1/2			659	759	573
	Feb.	9.00	36-1 1/2			604	772	585
EIGHT	Mar.	9.12	42-1 1/2			548	784	595
	Apr.	9.24	48-1 1/2			689	796	625
	May	9.37	54-1 1/2			791	808	644
	Sept.	9.49	6-1			613	728	647
	Oct.	9.61	12-1			708	737	650
NINE	Nov.	9.73	18-1			803	745	653
	Dec.	9.85	24-1			759	754	656
	Jan.	9.97	30-1			714	762	659
	Feb.	10.00	36-1			670	771	661
	Mar.	10.12	42-1			625	783	668
TEN	Apr.	10.24	48-1			767	796	675
	May	10.37	54-1			809	808	683
	Sept.	10.49	6-1			635	665	688
	Oct.	10.61	12-1			726	675	693
	Nov.	10.73	18-1			818	686	698
ELEVEN	Dec.	10.85	24-1			788	698	703
	Jan.	10.97	30-1			757	709	708
	Feb.	11.00	36-1			727	721	715
	Mar.	11.12	42-1			696	721	728
	Apr.	11.24	48-1			778	722	740
	May	11.37	54-1			800	722	753

This table has four distinct advantages:

First, it establishes rather definite standards and sets fairly accurate goals for each grade to attain. These are by no means the mere fanciful opinion of some moralizer; they are the outcome of the achievements of thousands of children collected in a scientific way.

Second, the test may be given any month in the school year and a rather accurate means of ready comparison with established standards is available. The rate of gain or loss from test to test, in case the tests are repeated, can be noted, the causes found and removed, and thus a scientific study of educational procedure may be carried out.

Third, it aids in the proper classification and gradation of students; it shows the grade in school and the standards of that grade in close proximity, thus throwing much light upon the attainment and the grade in which the student belongs.

Fourth, it suggests a plan whereby other standard tests than those here given may be arranged in such a way as to give more accurate comparisons than is now the usual rule. Those interested in the solution of similar problems have a means of adapting to their several needs.

NEW BEDFORD HAS TWO SUPERINTENDENTS.

Through a dramatic action of the school board of New Bedford, Mass., presided over by the mayor of the city, True C. Morrill was ousted and Allen P. Keith was elected superintendent of schools. Morrill's contract runs until July 1, 1923.

The action is preceded by a story of turmoil. Last year Keith was dropped and Morrill was elected for the term of one year at a salary of \$6,500. When the new members, who were ostensibly elected on a neutral platform, went into office on the first of the year the question was boiling hotter than ever, and by a vote of six to one Keith was elected to replace Morrill.

Morrill was asked to resign. He refused. His record had been above reproach and he saw no reason why he should not serve for the term for which he was elected. His dismissal followed. Morrill's attorneys then gave notice that they would hold the board responsible for the salary up to July 1, 1923.

Some of the leading citizens condemn the board in scathing terms. True C. Morrill, it is claimed, is an educator of ability who conducted himself with calmness and courteousness during the trying period of his incumbency. He came to New Bedford after the school board had announced the dropping of Keith and was willing to meet the disturbed situation. Keith promised a fight.

The school board without waiting until Morrill's term had expired replaced Keith with the result that the courts will have to determine who is entitled to the salary.

LEGISLATIVE CHANGES IN SCHOOL ADMINISTRATIVE CONTROL.

The legislative mills of the several states are beginning their slow and uncertain grind. The school people have thrown more bills into the legislative hopper than usual. These in the main relate to the financial phases and to school administration questions.

Numerous city school systems are battling with a shortage of funds and are seeking a larger share of the local tax yield. The rural centers, many of them, find that the present state distributive funds are either inequitable or inadequate, or both. The legislative clamor, therefore, is generally in the direction of financial relief. The measures relating to changes in school administrative authority are urged with equal earnestness. New York state school boards want financial independence and separation from general municipal control. Massachusetts also wants the mayor and city council to keep from meddling with school administrative affairs. Texas cities are wrestling with a similar problem.

From the standpoint of sound school administrative practice these measures are entirely in the right direction. In securing their enactment, however, many fallacious ideas and notions have to be combated. Those identified with municipal government who have any control over school administrative affairs are not inclined to yield that control to the school board.

It is remarkable how the mayors of Massachusetts and Texas are fighting against the idea of letting go of their hold on school matters. They have been accustomed to scrutinize the school budgets and pass such criticism as would be likely to find popular favor. The city councils of New York state are equally strenuous in their opposition to the financial independence of boards of education. The politician can in a minute conjure more adroit catch phrases in defending a dual system than the best experts in school administration can answer in a month.

The conditions which have grown out of a dual control by municipal government and school board have led to some odd situations. Imagine the city council and the mayor scrutinizing a teachers' salary list, making changes and exercising the veto power. Imagine a school superintendent's salary, fixed by the school board, being arbitrarily reduced by a city budget official. Imagine a city mayor exercising his prerogative of presiding over the board of education and telling everybody where to get off at.

The proponents of greater freedom of action in school administrative action must be conscious of the one outstanding fact that the experience of the past has demonstrated the wisdom of entrusting the schools to the school boards, and not to a divided authority. When the board of education is given complete authority, and made answerable to the general public for the conduct of the schools, the results are usually found satisfactory both as to the economies sought and the standards of educational service rendered.

The history of the past quarter of a century in American school administration, as exemplified in the cities, has been a change from a dual to a separate control of the schools. Step by step the school interests have been taken out of the hands of city councils and city mayors and entrusted solely to boards of education. The change has stood the test of time. The independent school board is no longer an experiment. It is a fact in the field of school administration.

QUALITY, UTILITY, CONVENIENCE AND ECONOMY

BLAIR'S KEYSTONE TABLETS



Quality of materials and care in manufacturing processes, distinguish the varieties of school tablets, blank books and printed forms, made and distributed thruout the educational world from Huntingdon, Pennsylvania. As pioneers in tablet making, it has been our object, thru all the forty-three years of business existence, to make but one quality—the best. To guarantee that quality, and to market our product in the most equitable manner, with prompt and satisfactory service. Catalogs and details are at your service.

Yours for good tablets

J. C. BLAIR COMPANY

Manufacturing Stationers Huntingdon, Penna

VISIT BOOTH No. 89

AT THE N. E. A. CONVENTION

SEE THESE PAPERS

This is only a partial list of Baker's School Papers.

Poster Papers

Penmanship Papers

Examination Papers

Ledger and Journal Papers

Legal Cap and Foolscap Papers

Construction Papers

Typewriting Papers

Mimeograph Papers

Hectograph Papers

Drawing Papers

We will have a complete exhibit of School Papers. We want you to see and examine our many grades and styles of high quality school papers. A cordial invitation to visit our exhibit is extended to all who attend the Department of Superintendence, N. E. A., Convention at Cleveland, Ohio, February 26th to March 1st, 1923.

BAKER PAPER COMPANY
Oshkosh, Wisconsin

Announcing

The consolidation of the

National Fibre & Insulation Co.
the Keystone Fibre Co. and the
American Vulcanized Fibre Co.

In order that we may unify our efforts to better serve our customers and through them the public — we have consolidated and in the future will be known as the

National Vulcanized
Fibre Co.
of Wilmington, Delaware





"STICK WITH GLUEY"

because—

**Eminent Educators Everywhere
Endorse Its Economy and
Exceptional Quality—**

Gluey is especially valuable in the primary grades as it teaches the little tads the value of using good tools.

In the gallon stone jars, or four ounce Handy-Tube, Gluey's Goodness is uniformly perfect. Send us your address and 10 cents for a trial tube.

THE COMMERCIAL PASTE COMPANY
Columbus Dept. 108 Ohio

"STICKS LIKE A BROTHER"

tack—don't talk

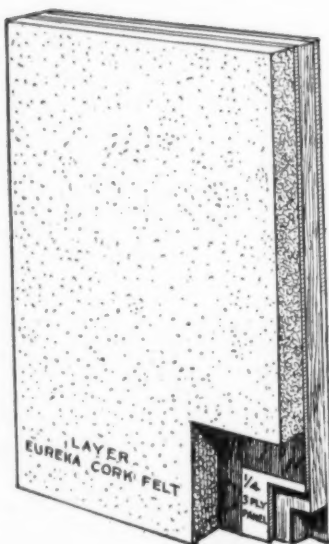
EUREKA CORK FELT BULLETIN BOARDS

afford a systematic method of handling all announcements.

Teachers find that Bulletin Boards are great time savers and those built of cork are the most economical and satisfactory.

EUREKA BULLETIN BOARDS are installed in classrooms, corridors, libraries, gymnasiums, cafeterias, etc.

Write for our illustrated catalogue which contains suggestions on the many uses of cork bulletin boards in schools. It is free.



PADDOCK CORK COMPANY
1209-17 DE KALB AVE.
BROOKLYN, N. Y.

MAKERS OF THE UNUSUAL IN CORK.

Economize! Install U. S. Inkwells

They Are
NOISELESS DUST-PROOF UNIVERSAL



School officials who want real economy plus service and satisfaction are equipping the desks in their schools with U. S. INKWELLS.

There are no hinges to break, corks to lose, they operate silently, easy to clean and keep clean, are non-evaporating and neat in appearance.

U. S. INKWELLS have been pronounced the most appropriate, substantial and satisfactory inkwells for school use.

Write for sample

U. S. Inkwell Company, Inc.

Manufacturers

DES MOINES

IOWA

Bruce's School Architecture Library

**A Reliable Reference and Guide to
Better Schoolhouse Planning
and Construction**

HIGH SCHOOL BUILDINGS VOL. II
GRADE SCHOOL BUILDINGS VOL. II (*In Preparation*)
MECHANICAL EQUIPMENT OF SCHOOL BUILDINGS—ALT
THE RURAL SCHOOL PLANT — CHALLMAN



*Descriptive literature and price
gladly furnished on request*

The Bruce Publishing Co.
202 Montgomery Building Milwaukee, Wis.

PALMER'S CAN'T SPREAD ERASER

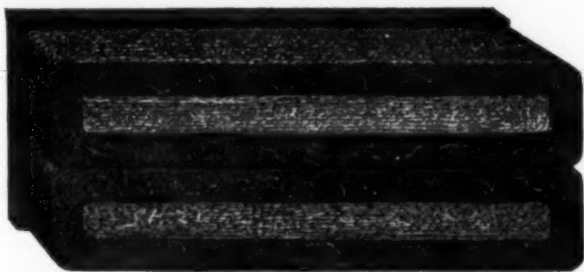


As its name would indicate—the Palmer Eraser simply cannot spread, because of its peculiar, patented design and construction.

It gathers the dust and holds it—yet may be cleaned as readily as any other eraser.

It is noiseless and dustless—has a soft, open cleaning surface, and will not mar nor scratch the blackboard.

The high quality of felt used, and the patented construction (Patented Oct. 26, 1915), insure unusually satisfactory wear and service.



Palmer's
REGISTERED TRADE MARK

PALMER CO.
MILWAUKEE, U. S. A.

Palmer's
REGISTERED TRADE MARK

Manufacturers for the Jobber.



Manual Training Bench No. 111

When in the market for Manual Training Benches, Domestic Science Tables, Sewing Tables, Drawing Tables, Visers, Hand Screws, etc., write to

C. CHRISTIANSEN

Manufacturer of this line since 1898

2814 West 26th St.,

Chicago, Ill.

HIGH SCHOOL ADMINISTRATION.

—Rice Lake, Wis. A survey conducted in the high school recently to determine what qualities students most admire in teachers produced some interesting data. A sympathetic disposition came first. This quality was named by 55 per cent of the students. Good methods of teaching came second, being listed by 46 per cent. Other qualities in the order of popularity, were willingness to help, impartiality, sense of humor and ability to maintain discipline. The students were free to express themselves in their own way and were not required to sign their names.

—The Sumner County High School, at Wellington, Kans., after an independent existence of 22 years, became a part of the city school system two years ago. The closer cooperation between the elementary schools and the high school under this arrangement, has brought about a forty per cent increase in the high school enrollment within the past two years. The enrollment in the four years of the high school is 570, as against an average enrollment of 380 for the last five years as a county high school.

—Fremont, Neb., has under construction a \$200,000 junior high school building. This building when completed will be one of the best school buildings in the state. It is of absolute fireproof construction, if such a building can be made. The building will not be ready for school use before September, 1923. In addition to the junior high school building, a \$50,000 grade building is being completed, ready for use at the beginning of the second term.

—The Supreme Court of Missouri has ruled that school boards are without authority to interfere with the membership of pupils in school fraternities.

Education Week at Grand Junction, Colo.

The high school at Grand Junction, Colorado, planned a unique feature during Education Week, which was successfully carried out during the first week in December.

To give persons employed during the day an opportunity to visit and observe the high school, arrangements were made to operate the school

at night. School was in session in the forenoon and sessions were then discontinued until 7:30 in the evening. Two full sessions of fifty minutes each were conducted in the evening.

It was an unusual and pleasing experience to see the seven hundred students of the school at work, with more than three hundred parents as spectators in the classrooms. The patrons had an opportunity to learn what the school is trying to accomplish and to know something about the methods through which the work is accomplished.

The results of the experiment were most gratifying. The students, it was found, attended as well or better, than in the daytime and the interest, attention and response were remarkably good. The patrons appeared to appreciate the opportunity given for visiting and called at as many departments as possible.

AMONG BOARDS OF EDUCATION.

—Philadelphia, Pa. The school board has selected a site which it is proposed to use for the new administration building to cost \$1,000,000.

—No schools have been closed in the state of Washington, according to a report made by Josephine Corliss Preston, the state superintendent. "Once in a while a school budget is exceeded and there is a threatened attempt to close the school" she states, "but the state department has always been able to adjust matters with the state bureau of inspection and hold the school open."

—The school board of Ionia, Mich., has gone before the public with a complete statement on the school growth of the town. Superintendent A. A. Rather prepared charts showing population and enrollment demonstrating that the latter is outstripping the schoolhouse capacity which are published in the local newspaper.

—Robert K. Speer has been added to the research staff of the Cleveland, Ohio, school system as assistant to the director. He comes to Cleveland from Columbia University. Previous to the time spent at Columbia, Mr. Speer taught in Minden City, Michigan. His home town is Ipsilanti. He received his A. B. degree from Michigan State Normal College, and his M. A. from Columbia University.

—Out of a total of 560 American teachers who went to the Philippine Islands on the United States transport Thomas twenty-one years ago only 34 remained in the Philippines and only eight are still engaged in teaching.

—Seattle, Wash. A class for principals has been organized, with meetings every other week. The purpose of the class is to enable the supervisors to explain definitely the courses of study so that principals may be better able to assist the teachers in carrying out the work outlined.

—Current expenses for operating the schools of New Jersey for the year 1921-22 amounted to \$42,856,195, an increase of \$3,777,586 over the previous year, according to figures given out by State Commissioner John Enright. The expenses of the state department and of the state board of education were \$156,102.

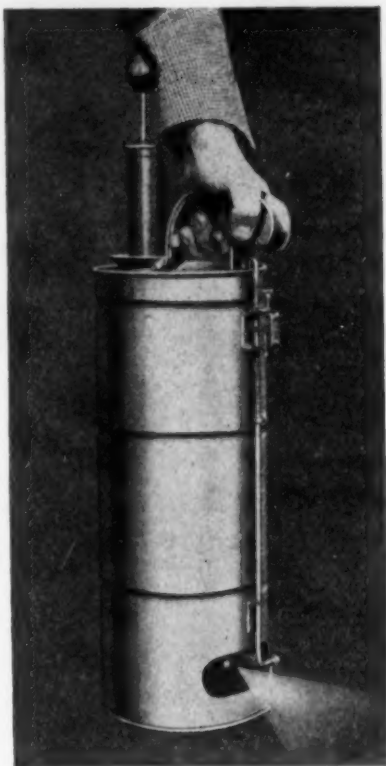
The greatest difficulty has been in furnishing facilities for the large number of pupils, the total enrollment for the year being 678,734, an increase in the day schools of 37,000 boys and girls. A teaching corps of 20,874 persons was required to teach this army of students.

—Mr. David B. Oliver, president of the board of education at Pittsburgh, Pa., has declined reelection to the position for another term. Mr. Oliver has held the position since 1911, giving eleven years to the work as president and more than fifty years of service to the schools of Allegheny and Greater Pittsburgh. Because of his experience in school matters, the Governor of Pennsylvania in 1907, appointed Mr. Oliver as a member of the commission of seven to draft a new school code. In 1911 the results of his labors were written into the laws of the Keystone State and the school code commission later became the first state board of education. Mr. Oliver in continuing as a member of the board with which he has so pleasantly been associated, will act as a member ex-officio of standing committees and will have authority to sign official documents.

MYCO SPRAY OIL

MYCO PNEUMATIC FLOOR OILER

(Patent applied for)



Myco Spray Oil used in conjunction with the Myco Pneumatic Floor Oiler will prove a revelation to you. Cleaner floors free from dust and dirt, no black corners; your janitor will be able to do twice as much with half the oil. Order a drum and a sprayer for trial.

"Our Success Represents Confidence Won by Integrity."

MASURY-YOUNG COMPANY

60 ROLAND STREET BOSTON, MASS.

Established in 1857.



HARBUTT'S PLASTICINE

FOR MODELING

Antiseptic and Never Hardens

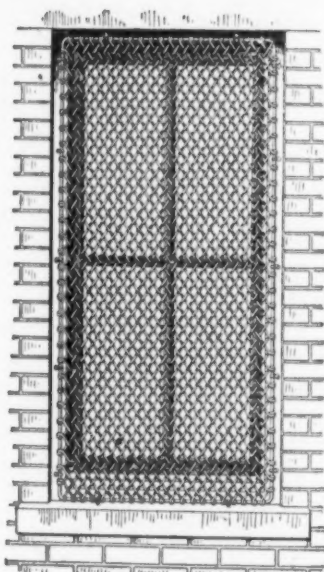
J. L. HAMMETT COMPANY

KENDALL SQUARE, CAMBRIDGE

Distributing Agents for U. S.

Order from your School Supply Dealer

BADGER WIRE WINDOW GUARDS



This illustration shows guard in place.

afford permanent protection against the breakage of school windows from all causes.

BUY WIRE WINDOW GUARDS INSTEAD OF WINDOW GLASS.

The saving in broken windows makes the installing of BADGER WIRE WINDOW GUARDS a real economy. Also ideal protection for lights and windows in the gymnasium.

Made to order in any size or shape to fit the window. BADGER WIRE WINDOW GUARDS may be had with either round or Channel frame. They are easily installed.

Order through your nearest School Supply Jobber.

BADGER WIRE AND IRON WORKS

Cleveland and 25th Aves.

Milwaukee, Wisconsin

TWO ESSENTIALS

Common Sense in School Supervision

By CHARLES A. WAGNER
Superintendent of Schools, Chester, Pa.

A most complete and specific treatise covering the subject of school supervision in its entirety. The work is based on thirty (30) years of practical supervisory experience, including classroom experience, routine supervision, conferences of teachers and supervisors; conferences of supervisors and superintendents; public lectures and private discussions of the principles of supervision. Every supervisory practice recommended has been tried and thoroughly tested in actual service and found productive of absolute satisfaction.

Cloth, 204 pages—Price, \$1.30, net.

Control of City School Finances

By GEO. W. FRASIER, Ph.D.

A most suggestive and serviceable book which is devoted to the thesis that the schools should be independent of municipal meddling with budgets and school moneys.

Its subject matter commences with the very fundamentals of the problem. The legal phase is next considered, followed by expert opinion of leading administrators. Then by means of an index figure established through a survey of 169 cities, the fact is proven, that the schools are more efficient where the school board controls its finances.

Cloth, 132 pages—Price, \$1.25.

THE BRUCE PUBLISHING COMPANY
202 MONTGOMERY BUILDING MILWAUKEE, WIS.



Fredericktown School Bells

have a peculiarly sweet, clear, soft and inviting tone, due in part to the exclusive composition of the metals used and likewise to the shape and proportions of the bell.

In buying a Fredericktown School Bell you are assured of obtaining satisfaction. They have been sold for practically a lifetime and are fully guaranteed.

Let us send you a copy of our catalog.

Fredericktown Bells have assembled the masses for more than 66 years.

J. B. Foote Foundry Co.

Fredericktown, Ohio.

THE FREDERICKTOWN
BELLS



PUBLICATIONS.

The Use of Mental Tests in School Administration. By Virgil E. Dickson, Director of Bureau of Research and Guidance. Monograph No. 4, June, 1912, issued by the board of education of Berkeley, Calif. This monograph represents the first printed report of the results of the work of the Bureau of Research of Berkeley. The first chapter concerns itself with a brief summary of some of the major types of work in the Berkeley schools carried on by the bureau. The later chapters set forth in a scientific impersonal way the relation of measurement to efficiency in the classification and teaching of children. Both of these are central problems of large concern in the administration of schools. Hundreds of children in the Berkeley schools have profited during the last three years in both happiness and growth as a result of the more scientific handling of them through the work of the bureau. The report discusses such topics as distribution of chronological and mental ages, reliability of tests for prognosis, grade location as related to mental age and chronological age, reliability of individual test as shown by retests of the same child, reliability of group mental tests, and school organization and classification with reference to individual differences.

Sound-Proof Partitions. By F. R. Watson. Bulletin No. 127, March, 1922, issued by the Engineering Experiment Station, University of Illinois, Urbana. Since 1915 the problem of sound-proofing has engaged the attention of scientists who have completed investigations in the light of the known phenomena of sound and obtained results that are now being applied in practical constructions. The pamphlet takes up the topics of action of sound with applications to buildings, insulation of sound, experimental investigations of action of materials, apparatus and methods used in investigation, transmission tests, investigation of thin plaster partitions, examples of sound-proof rooms, and sound-proof buildings.

Auditor's Annual Financial Statement, Los Angeles, California, June, 1922. The report offers a typical classification of accounts, a consolidated statement of revenue and expenditures, a cash statement of both elementary and high

schools, an outline of the uninvested surpluses, and a statement of the property and equipment valuations. There is also a table of expenditures for each school.

Improving the School Building Facilities of One- and Two-Teacher Districts Through Measurement. By Julian E. Butterworth. Extension Bulletin 52, June, 1922. Issued by the New York State College of Agriculture of Cornell University, Ithaca, N. Y. The present bulletin has for its purpose the stimulation of an interest in, and a more intelligent study of, one of these conditions affecting education—that of the small school building and its grounds. The pamphlet presents an analysis showing the more important features of a good rural school plant; a method of recording, specifically and uniformly, facts regarding it; a set of standards as the basis for an interpretation of these facts; and a method by which the conditions in any particular building may be so presented as to convey a definite idea of its needs. The pamphlet contains a typical school building score card and offers suggestions for its use in scoring buildings.

A Critical Study of Certain Silent Reading Tests. By Walter S. Monroe, Director of the Bureau of Educational Research, College of Education, University of Illinois, Urbana. The study in this monograph was undertaken for the purpose of securing such data with reference to certain silent reading tests. The report is presented in hopes that users of silent reading tests might find information helpful in making an intelligent selection of educational tests in this field. The monograph will be of interest to students in the field of educational measurements.

Milk and Our School Children. By Bernice C. Reaney. Health Education Publications, No. 11, 1922, prepared by the Child Health Organization of America for the United States Bureau of Education, Washington, D. C. The material contained in this pamphlet was prepared by Miss Reaney as a thesis for a master's degree. Part I of the thesis contains a very careful and detailed explanation of the method by which the data regarding the extent of the use of milk by school children was obtained. The problem

of how to interest children in drinking milk has as many solutions as there are ingenious teachers who can work out the answer in the light of the individual needs of their respective pupils. The pamphlet describes the steps by which one teacher solved her particular problem.

MR. RONCOVIERI RETIRED.

Alfred Roncovieri retired January 8 as superintendent of San Francisco's schools after 21 years' continuous service. He was praised for his long record of public service in resolutions adopted by the board of education at a recent meeting.

The Board of Education at its annual executive session appointed A. J. Cloud as temporary successor of Alfred Roncovieri.

Mr. Cloud has been chief deputy superintendent in the San Francisco schools since 1916, and will act until such time that a permanent head has been selected from a large field of educators already mentioned for the position.

Fred Dohrmann, Jr., who was reelected president of the Board of Education, has left for the east and will make an unofficial survey of the educational field which was recently covered by Alfred Exberg, member of the board. Exberg will report on his Eastern trip soon and is expected to make recommendations concerning the adaptability of several Eastern men for the job.

Before leaving for the East, President Dohrmann outlined the board's policy for the conduct of the school system for the coming year, with especial emphasis on the \$12,000,000 rehabilitation plan voted for at the recent election in November.

Dohrmann declared that it will be the policy of the board to go about the new building program in a "safe and sane" manner. The city will be surveyed by educational experts, he said, with a view toward providing for the future school needs of the city. Until such time as the survey is completed no building plans for any section of the city will be considered.

Mr. Cloud, who assumed his duties of school superintendent, is a graduate of the University of California. He was formerly secretary to Dr. W. W. Campbell of Lick Observatory, who was recently named president of the University of California.

ROBERTSON'S PRODUCTS

SYMBOLS OF CLEANLINESS AND SANITATION

ORIGINAL 20th CENTURY SOAP

is the most economical as well as the most satisfactory material for cleansing purposes. For schools it is unsurpassed in cleaning woodwork, desks, furniture, and all floor cleaning. It keeps slate blackboards from becoming glossy. Cleans off the chalk marks and brings back the original finish. Only pure vegetable oils are used in the manufacture of Original 20th Century Soap.

NEW TRIUMPH LIQUID SOAP

is a smooth velvety product producing an abundance of lather and cleanses thoroughly. It is made of absolutely pure vegetable oil.

It is the ideal soap for school children because it is odorless and antiseptic. Will not injure the skin. Wounds, cuts, etc., can be readily washed with beneficial results, instead of the ill effects of so many soaps. New Triumph Liquid Soap is 20% anhydrous soap. Registered U. S. Pat. Office.

ROBERTSON'S PRODUCTS INCLUDE A PRODUCT FOR EVERY CLEANING PURPOSE

We manufacture Brushes, Disinfectants, Liquid Soaps, Soap Powder, Scouring Powder, Cleaners, and are Headquarters for Paper Towels, Toilet Paper, Mops, Etc.

Theo. B. Robertson Products Co., Inc.

Member, National School Supply Association

700-704 W. DIVISION ST.

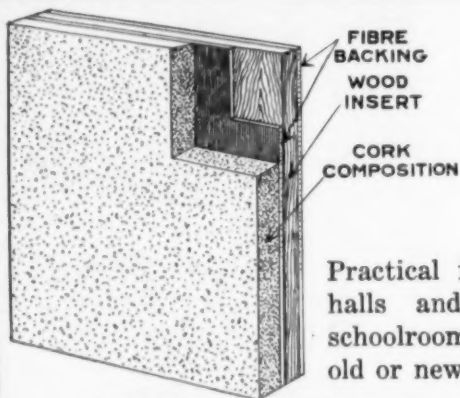
CHICAGO, ILLINOIS

It Took Him a Half Day To Find It

YOU CAN FIND IT IN HALF A MINUTE

If you use Roberts & Meck's
RECORD FORMS, SCHOOL RECORDS
of all kinds. Samples and prices on application.

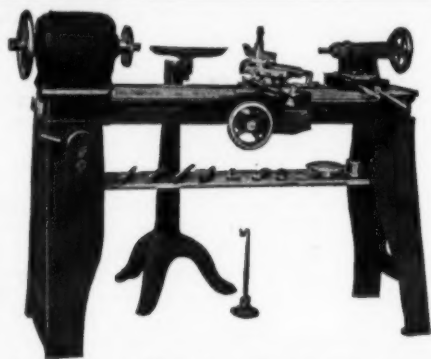
ROBERTS & MECK
HARRISBURG, PA.



"STANDARD"
CORK
Bulletin Board
THE BEST
BY
ANY TEST

Practical for display purposes in
halls and over blackboards in
schoolrooms. Easily installed in
old or new buildings.

USEFUL, ATTRACTIVE and PERMANENT
We Manufacture All Sizes. Write for Sample.
STANDARD BLACKBOARD CO.
Cor. Second and Walnut Sts. ST. LOUIS, MO.



If In Doubt
consult the School
Authorities of Buf-
falo, Jersey City,
Memphis, San Fran-
cisco, Winnipeg,
Rochester and a hun-
dred other cities we
could name if space
permitted and learn
what they think of

American Woodworking Machinery for Manual Training
Work.

Every School Board should have our catalog on file.
Let us send you a copy.

American Wood Working Machinery Co.
591 Lyell Avenue, Rochester, N. Y.

THE ARMSTRONG COMPANY SECTIONAL SCHOOL BUILDINGS



OUR PLANS
APPROVED
BY YOUR
SCHOOL BOARD

AND MEET EVERY
REQUIREMENT
OF YOUR
BUILDING CODE

The ARMSTRONG SECTIONAL SCHOOL BUILDINGS are complete in every
detail, having double floors, double side walls and ceilings. With every modern con-
venience makes them the best Portable School Buildings on the market today. With
the perfect lighting and ventilation, they are without equal. Our buildings can be
taken down and moved to another location without mutilating in the least any of
the parts. We can prove it. If you write us what you desire, we will send you
full details. We are specialists in Sectional School construction.

THE ARMSTRONG COMPANY, P. O., 401, ITHACA, NEW YORK

OUR FREE SERVICE in teaching the Mechanics and Pedagogy of Palmer Method Pen-
manship is still offered to all teachers whose pupils are provided
with individual copies of our manual. OTHER TEACHERS may enroll for the complete
correspondence course upon payment of the small fee of ten dollars.

OUR THIRTY VISITING INSTRUCTORS cover the entire United States and their
services are still free to all schools hav-
ing Palmer Penmanship adoptions.

THE PALMER METHOD PLAN when followed exactly leads to enduring handwrit-
ing, which becomes a big asset in school, business
and social life.

PALMER METHOD PENMANSHIP is written at commercial speed and is as plain
as print. Thus, it conserves the time of the
writer and the time of the reader. Palmer method Penmanship compels healthful posture
while writing, thus conserving health and vision.

PALMER METHOD SPELLERS all in Palmer Method Penmanship are attracting
more and more the attention of modern educators.
Follow immediately the Palmer Method Penmanship lesson with the Palmer Method
Spelling lesson, and the results in both subjects will be highly gratifying.

PALMER METHOD STANDARDIZED PENMANSHIP SUPPLIES are sell-
ing in
very greatly increased quantities because they offer the greatest value.

THE A. N. PALMER COMPANY

30 Irving Place, New York City. 2128 Calumet Ave., Chicago. Pittock Bldg., Portland, Ore.

The Norton Liquid Door Closer with Hold-Open Arm

Use The Norton
Liquid Door Closer
with Hold-Open
Arms and do away
with door stop on
bottom of door.



Approved by the National Board of Fire Underwriters Laboratories
THE NORTON DOOR CLOSER CO., 2900-2918 N. Western Ave., Chicago

WHY IS THE NORTON
CLOSER WITH HOLD-OPEN
ARMS THE BEST SUITED
FOR SCHOOLHOUSE WORK?

1st. The doors are closed
with a uniform speed which
gives the pupils a chance to
go through a door without
getting caught or injured.

2nd. Having two speeds
—the speed at the latch can
be set for absolute quiet—
no latch necessary.

3rd. The Hold-Open De-
vice connected with the arm
of the Door Closer is auto-
matic, a child can operate it
—just a push or pull on the
door is all there is to do to
it. Does away with door
stop, hook or strap to hold
door open. Every school-
room should have one.

VICTOR Portable STEREOPTICON

The
PERFECT PROJECTOR
for every need

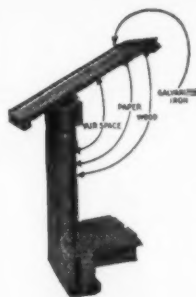
SHIPPED ON TRIAL
SPECIAL EASY TERMS



Hundreds of illustrated
lectures for rent.

WRITE FOR
INFORMATION

VICTOR ANIMATOGRAPH CO. INC.
141 VICTOR BLDG. DAVENPORT IOWA.



Bossert Schools

Are Warm in Winter and Cool in Summer

We are equipped to furnish any size building on short
notice. Prices of same depend on requirements and State
Laws—but in every case are the lowest for quality of ma-
terial supplied. Remember, this is not a cut lumber propo-
sition, and the cost of erecting is a very small item. While
not essential, as any unskilled labor can do it, we will, if
you desire, arrange to erect all buildings. Buildings can be
taken down and re-erected any number of times without
marring a single feature.

We have made portable school houses for other people for over 25 years. Now
you can buy Bossert School Houses with all our new patents and improvements
direct from us and save money for your school board.

Write us full requirements and we will send
details of cost of building completely erected.

LOUIS BOSSERT & SONS, Inc.

Builders of School Houses for over 25 years.
1323 Grand Street Brooklyn, N. Y.

ENGRAVING CRAFTSMANSHIP



"YOUR STORY IN PICTURE LEAVES NOTHING UNTOLD"

Paramount in designing and engraving are workmanship and service at conservative prices. Premier Craftsmanship assures you of these together with complete satisfaction.

PREMIER ENGRAVING CO.

DESIGNERS  ENGRAVERS
MILWAUKEE 816 WINNEBAGO STREET WISCONSIN



You Receive
Full Value
When You
Buy

FLAGS

MADE OF

STERLING and DEFIANCE

All Wool Double Warp
Bunting

Two Ply Cotton
Bunting

THE FLAGS THAT GIVE SERVICE

SOLD BY DEALERS EVERYWHERE

Manufactured only by

ANNIN & CO.

Largest Flag House in the World

99-101 FULTON STREET

NEW YORK, N. Y.

PENNY PACKET SEEDS
For School and Home Gardens

YOUR PUPILS WILL LIKE IT

Make it possible for your pupils to have some sort of a garden, if only a small plot at home. No expense to you or your School Board if you use our plan.

Ask for a free demonstration outfit, including literature and samples of seed.

 **THE CHILDREN'S FLOWER MISSION** 
5700 Detroit Ave - Cleveland Ohio



Are you serving milk to the children in your school?

Scientific records show added mental and physical efficiency where this has been tried.

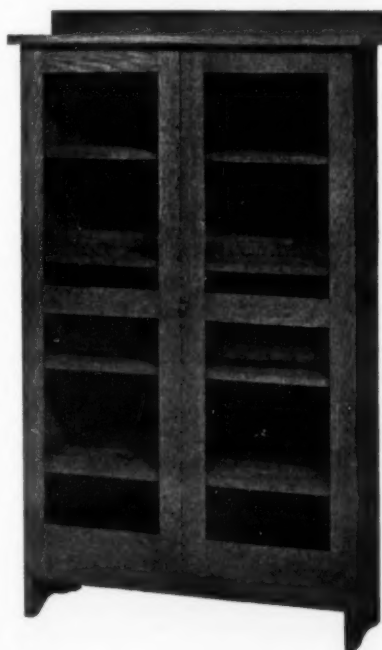
Serve milk in half pint bottles and insert a Purity Straw through bottle cap. Sanitary and economical. No washing of glasses and no breakage. Children cannot gulp milk when served in this way. Purity Straws are specially made for this use. So strong they will not break if bent or crushed nor soften after longest exposure. Sample box and information on request.

COE MANUFACTURING CO.

35 S. Warren St.,
NEW YORK CITY

TEACHERS

Globe Special Book



Case

Shelves more than three hundred books.

Special price, \$12.00, f.o.b. Morristown.

Shipped day order is received.

GLOBE BOOK COMPANY, Morristown, Tenn.



TEACHER AGENCIES



Our Reputation is National
Our Service Unexcelled
Positions Kindergarten to University Presidents
ROCKY MOUNTAIN TEACHERS AGENCY
410 U.S. NAT. BANK BLDG. DENVER, COLO.
WM. RUFFER, Ph. D. Manager

COME TO HEADQUARTERS

BRANCH OFFICES:
Portland, Oregon, N. W. Bank Bldg.
Minneapolis, Minn., Lumber Exchange
Los Angeles, Calif., Chamber of Commerce
230 Rialto Bldg., Kansas City, Mo.

COLLEGE GRADUATES Recommended Exclusively
—except in vocational fields. No elementary school positions. Any subject from high school up. Leading bureau for teachers of Commercial, Industrial and Physical Education. 20th year. Covers all states. Tell us your needs.
SPECIALISTS' EDUCATIONAL BUREAU
ROBERT A. GRANT, Pres.,
Odeon Bldg., St. Louis, Mo.

FISK **TEACHERS' AGENCY**
1020 McGEE ST.
KANSAS CITY, MO.
Associated Fisk Agencies in Principal Cities.
J. A. DEVLIN, MANAGER

Hathaway Teachers' Agency

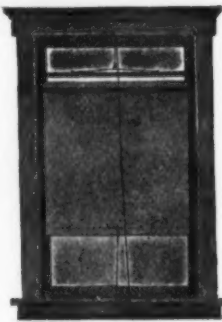
Miss Nellie S. Hathaway —Managers— Mrs. E. H. Scott
Bennington, Vt. 353 West 117th St., New York

Free enrollment in both offices.
Free service to employers in answer to direct calls.

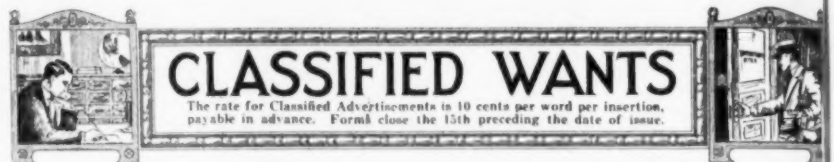
2 OF THE 15 VARIETIES



**STEELE'S
DUCK
SHADES**



Write for Prices, Catalog and Free Sample
OLIVER C. STEELE MFG. CO.
SPICELAND, IND.



CLASSIFIED WANTS

The rate for Classified Advertisements is 10 cents per word per insertion, payable in advance. Form close the 15th preceding the date of issue.

PICTURES

The Copley Prints for school walls have the very highest endorsements. See Illustrated Catalogue. Curtis & Cameron, 2 Harecourt Street, Boston, Mass.

WANTED.

Will pay 50 cents for January, February and March issues of American School Board Journal. Copies must be in good condition. Address Classified Wants, American School Board Journal, Milwaukee, Wis.

EQUIPMENT

Will buy new and secondhand school desks, any quantity. John A. McKenna, 121 N. Carey St., Baltimore, Md.

CATALOGS

Send today for free book containing valuable information on air washing and conditioning, including temperature and humidity tables and examples of efficient air conditioning installations. Write to Bayley Mfg. Co., Dept. H, Milwaukee, Wis.

BOOKS

Common Sense in School Supervision—by C. A. Wagner. A complete and specific treatise on school supervision, based on 30 years of practical supervisory experience. Order your copy today. Price \$1.30. Bruce Publishing Co., Milwaukee, Wis.

Will pay fifty cents for an August, 1915, copy of the American School Board Journal. Copy must be in good condition. Address American School Board Journal, Milwaukee, Wis.

SILICATE VENEER PLATE
BLACK BOARD

Why don't you purchase the best goods for your school? Our revolving blackboards and roll blackboards have been in constant use in all the Public Schools in New York, and the principal cities for thirty-six years, which is a sufficient guarantee. Send for our illustrated catalog and discount sheet and compare prices with other manufacturers.

N. Y. Silicate Book Slate Co.
20-22-24 Vesey Street
NEW YORK



**USE THE DAYLIGHT
KILL THE GLARE**

EVER-LASTING-TRANSLUCENT

MAKES BETTER SHADES AND
SHADES BETTER

Shurlox
Awning & Shade Co.

CHICAGO
563 WEST MONROE

OUR FOLDER TELLS THE STORY. WRITE FOR IT TODAY

Protect the Health of the Children

If the children in the classroom should be bright and cheery the heat must be uniform and the ventilation just right.

Heating and Ventilation are two important factors in the schoolroom. If the air in the schoolroom is foul and ventilation poor, disease is almost inevitable.

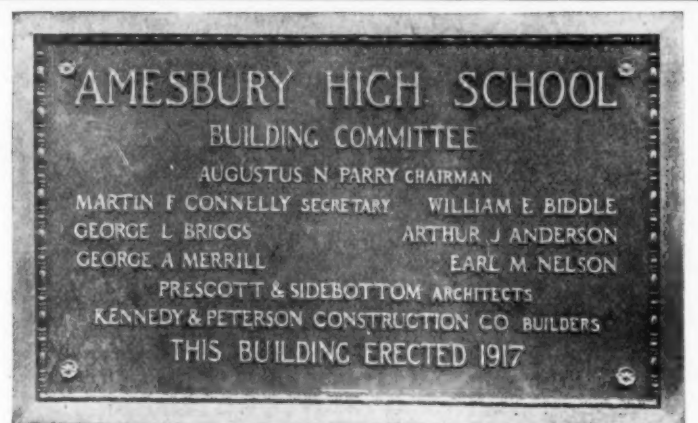
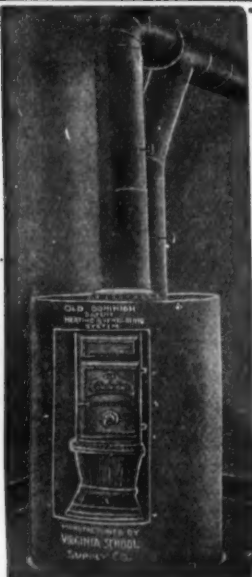
OLD DOMINION PATENT HEATING AND VENTILATING SYSTEM

will keep the room fresh with pure air yet warm and comfortable.

No separate independent foul air ducts or flues made of brick or metal are required. It is easy to set up and regulate and will not clog with soot or rot out. Every part is combined and all stove and ventilating pipes up to five feet are furnished.

Our descriptive catalog gives full information and will be sent upon request.

Virginia School Supply Company
2000-2012 W. Marshall St. Richmond, Va.



HONOR ROLLS—MEMORIAL TABLETS—IN BRONZE
MODELED, CAST AND FINISHED BY
ALBERT RUSSELL AND SONS CO.
125 MERRIMACK ST. NEWBURYPORT, MASS.



DEPARTMENT OF SUPERINTENDENCE

Cleveland, Feb. 25-March 1

We shall be glad to see you at our booth, No. 15

Our employment service, national in its scope and comprising the largest teacher-placement work under one management in the United States, includes departmental and administrative work in public and private schools, colleges and universities; also such positions as business managers and purchasing agents for schools, accountants, private secretaries, cafeteria directors and trained nurses.

We operate the FISK TEACHERS AGENCY of Chicago, the NATIONAL TEACHERS AGENCY of Washington, New York, Boston, Chicago and Evanston, and the AMERICAN COLLEGE BUREAU, with its general office at Evanston, Ill.

We shall have booth No. 15 at the Auditorium during the meeting of the Department of Superintendence at Cleveland, Feb. 25-March 1. We extend a cordial welcome to all attending the meeting to call at our booth.

Steger Bldg.,
Chicago

Security Bldg.,
Evanston

Ernest E. Olp,
Director

FOR SERVICE



NOT PROFIT

1254 Amsterdam
Ave., New York

14 Beacon St.,
Boston

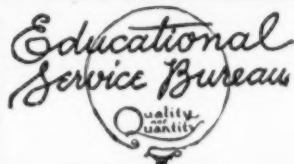
Southern Bldg.,
Washington

We Specialize in Brains

Character, Personality, Teaching Power and Service. By advertising more widely than any other Agency, and by visiting State and District meetings, schools and colleges, from Dakota and Minnesota to Texas and Oklahoma, we have built up the largest SELECT LIST of LIVE teachers ever assembled. Our tenth year of recommending only when asked to do so by employers. Owing to our professional standards most of the Higher Institutions as well as the best Secondary schools in forty-four States and three foreign countries used our service the past season. Fifteen hundred square feet of office space, with every known equipment for doing efficient work, INCLUDING A FINDEX BUILT TO ORDER, enables us to fill vacancies from Kindergarten to University with teachers who have been tested, investigated, and, in many cases personally interviewed by our representatives direct.

A Distinct Service for Educators who appreciate Ethical Standards.

THE WESTERN REFERENCE & BOND ASSOCIATION
Department of Education, 499 Gates Bldg.
KANSAS CITY, MO.



Three Classes of Teachers Who Should
Enroll in Our Agency

- 1—Those who desire a better locality.
- 2—Those who want a better salary.
- 3—Those who possess average or more than average ability. Write Manager E. A. Freeman for booklet.

EDUCATIONAL SERVICE BUREAU
Handicraft Bldg., 89 So. Tenth St.
Minneapolis, Minnesota

TEACHERS WANTED

For Schools and College—Every day of the year

NATIONAL TEACHERS AGENCY, INC.

D. H. COOK, Gen. Mgr.

HOME OFFICE—Philadelphia, Pa.

—BRANCH OFFICES—

Pittsburgh, Pa.; Indianapolis, Ind.; Syracuse, N. Y.; Northampton, Mass.

No charge to employers—No charge to candidates till elected.

Positions waiting—correspondence confidential.

LET US BE THE CONNECTING LINK AND SOLVE YOUR BUSINESS WORRIES

We Have the
TEACHERS

We Have the
SCHOOLS

CENTRAL EDUCATIONAL BUREAU

Metropolitan Bldg.,

Saint Louis, Mo.

Brewer Teachers' Agency

Suite 50-51, Auditorium Building, Chicago

The Oldest National Agency—Founded 1882 by Orville Brewer

Forty Years of Honorable and Efficient Service

We have the teachers—Let us know your needs

The day of the teacher is coming!

Our purpose is to hasten its arrival.

TEACHERS—SUPERINTENDENTS—PROFESSORS

Have you registered with us? Have you listed your vacancies?

Our Registration Bureau is ABSOLUTELY FREE.

Let us help you:—Write us. Wire us. Phone us. Come to see us. Our Motto:
"Service First." Our address:

SOUTHERN SCHOOL-BOOK DEPOSITORY, INC.

Atlanta, Georgia.

Distributors of School and College text books.

The Pratt Teachers' Agency

No. 70 FIFTH AVENUE, NEW YORK

RECEIVES calls at all seasons for college and normal graduates, specialists, and other teachers in colleges, public and private schools, in all parts of the country.

Advices parents about schools.

WM. O. PRATT, Manager

PARKER

TEACHERS' AGENCY

Twenty Years of Real Service
to School Boards

12 South Carroll Street

MADISON, WISCONSIN

SOUTHERN TEACHERS' AGENCY

COVERS THE SOUTH

COLUMBIA, S. C.

W. H. JONES, Manager

CHATTANOOGA, TENN.

RICHMOND, VA.

The H. D. Yates Teachers' Bureau

728-30 Stahlman Building, Nashville, Tennessee

PERSONAL SERVICE AND
DIRECT RECOMMENDATIONS

"THE AGENCY OF QUICK SERVICE AND EFFICIENCY"

WESTERN TEACHERS' EXCHANGE

DENVER, COLORADO
Gas & Electric Building

CHICAGO, ILLINOIS
Peoples Gas Building

MINNEAPOLIS, MINNESOTA
The Plymouth Building

BERKELEY, CALIFORNIA
Berkeley Bank Building

Free Enrollment—All Offices

We Render Efficient Service To School Boards and Teachers

The Only Agency That Maintains Educational Men Constantly in the Field

Albany Teachers' Agency, Inc.

81 CHAPEL STREET, ALBANY, N. Y.

Provides Schools and Colleges with Competent Teachers.

Assists Teachers in Securing Positions.

WILLARD W. ANDREWS, President

F. WAYLAND BAILEY, Secretary

Schermerhorn Teachers' Agency

Established 1855

CHARLES W. MULFORD, Prop.

366 Fifth Ave., between 34th and 35th Streets, NEW YORK

A SUPERIOR AGENCY FOR SUPERIOR PEOPLE. WE REGISTER ONLY
RELIABLE CANDIDATES. SERVICES FREE TO SCHOOL OFFICIALS.

THE ADAMS-SMITH TEACHERS' AGENCY

Including The McCullough Teachers' Agency

J. PORTER ADAMS, Manager

224 South Michigan Avenue, Chicago, Illinois

NO REGISTRATION FEE

NO ANNUAL DUES

Send for registration blank

Choice Positions Filled Every Month of the Year

In Every Section of the United States

F. T. Persinger
Manager

THE BEST SERVICE COMPANY

212 Walker Building
Minneapolis, Minn.

SCHOOL BOARDS:

If you need Teachers, Superintendents or Principals, let us co-operate with you.

TEACHERS:

If you are looking for a position, we can place you.

OUR MOTTO:

The right teacher for the right place—prompt service.

ALBERT

TEACHERS' AGENCY

25 E. Jackson Boulevard,

Chicago, Illinois.

Established 1885—Still under same active management. Best Schools and Colleges permanent clients. Best qualified men and women on our available list. Prompt service.

Other Offices—New York, Denver, Spokane.

INTERSTATE TEACHERS' BUREAU,

RHODES BUILDING

ATLANTA, GA.

Organized 1901. Prompt and effective service

Member, National Association of Teachers' Agencies.

SETH THOMAS

ELECTRIC CLOCK SYSTEMS

WHY is this system preferred by Architects and Engineers?

As Clock Manufacturers for over one hundred years we appreciate the absolute essentials requisite to continuously accurate time keeping.

As a first essential the control of the time, the Master Clock, is built on the soundest scientific horological principles. With solid, heavy brass plates, cut gears and polished cut pinions, and a jewelled escapement, combined with the unique feature of power furnished by gravity through a weight automatically raised by a magnet, this movement is complete in its excellence.

Realizing that no Time System is better than its weakest point, we have developed each unit to equal in design and construction our Master Clock.

Secondary Clock. Substantial movement, absolutely positive, with hands locked at all positions of armature, preventing clocks gaining or losing of time through slipping of hands.

Program Instrument. Simple, positive, Minute interval, ribbon type, fitted with automatic silencing device to cut out Saturdays, Sundays or any other 12-hour period.

Combination Push Button and Connector Board. Cross connection board permits connecting of any bell or series of bells on any of the bell ringing schedules provided for. The Push Button Board permits of the manual ringing of any bell or group of bells.



Relay. Open circuit, sliding contact, fitted with carbon and platinum points.

Charging Board. Arranged for Alternating or Direct Current. Fitted with Voltmeter, Ammeter, Knife switches, Circuit breakers, Resistance coils and fuses. Alternating current boards equipped with either American Chemical or Tungar Rectifier. Charging Board may be equipped with automatic charging device, by which discharge from batteries is replaced each hour.

Wood-work. Regularly made in mahogany and quartered oak—special finishes to match woodwork where desired.

The construction and finish of our cabinet work is the same as the clock cases in our regular line, which is unequalled in this country.

Write for descriptive Bulletin and prices

SETH THOMAS CLOCK CO.

OFFICES — New York: 19 West 44th Street

Chicago: 215 West Randolph Street

San Francisco: 140 Geary Street

SALES REPRESENTATIVES:

KEEGAN ELECTRIC CLOCK CO.
294 Washington St., Boston

WHITE & CONVERSE
915 Metropolitan Life Bldg., Minneapolis, Minn.

HERBERT BRYAN
The Bourse, Philadelphia, Pa.

School Goods Directory

The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these firms.

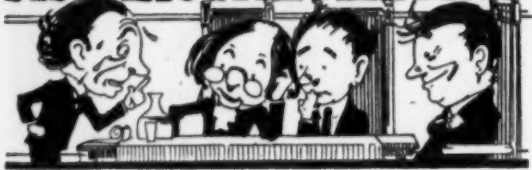
- AIR CONDITIONING APPARATUS**
American Blower Company
Buckeye Blower Company
Nelson Corporation, The Herman
Chicago Artificial Slating Co.
- ASH HOISTS**
Gills & Geoghegan
- ATHLETIC GOODS**
Chicago Gymnasium Equipment Co.
- AUDITORIUM SEATING**
American Seating Co.
Empire Seating Co.
Haywood Bros. & Wakefield Co.
Kunda Company, The Theodor
N. J. School Furniture Co.
Peabody School Furniture Co.
- BELLS**
Foots Foundry Co., J. B.
- BLACKBOARDS—COMPOSITION**
Beckley-Cardy Co.
N. Y. Silicate Book Slate Co.
Bowles Co., E. W. A.
Standard Blackboard Company
Weber Costello Co.
- BLACKBOARD-SLATE**
Keenan Structural Slate Co.
Natural Slate Blackboard Co.
Penna. Structural Slate Co.
- BLEACHERS**
Leavitt Mfg. Company
- BOOK CASES**
Globe Book Company
- BOOK COVERS**
Holden Patent Book Cover Co.
Iroquois Publishing Company
Peckham, Little & Co.
- BOOK PUBLISHERS**
American Book Company
Educational Publishing Co.
Educational Bindery Company
Ginn & Company
Heath & Co., D. C.
Houghton, Mifflin Co.
International Text Book Co.
Iroquois Publishing Company
Laidlaw Brothers
Lippincott Co., J. B.
Little, Brown & Company
Merriam Co., G. & C.
Newson & Company
Palmer Co., A. N.
Pittman & Son, Isaac
Roberts & Meck
World Book Company
- BRUSHES**
Palmer Company, The
Robertson Products Co., Theo. B.
- BUILDING MATERIALS**
Asbestos Buildings Co.
Durlon Co., Inc., The
Indiana Limestone Quarriesmen's Assn.
Natl. Bldg. Granite Quarries Assn.
National Terra Cotta Society
N. W. Expanded Metal Company
Structural Slate Company
- BULLETIN BOARDS**
Kewanee Mfg. Company
Paddock Cork Company
- CAFETERIA EQUIPMENT**
Coe Manufacturing Company
Pick & Company, Albert
Sani Products Co., The
Van Range Co., John
- CHARTS**
Nystrom & Co., A. J.
Weber Costello Company
- CHALK TROUGHS**
Dudfield Mfg. Company
- CLOCKS—PROGRAM**
International Time Recording Co.
Landis Eng. & Mfg. Co.
Standard Electric Time Co.
Thomas Clock Co., Seth
Time Systems Co., The
- CRAYON**
American Crayon Co.
Binney & Smith
National Crayon Co.
Peckham, Little & Co.
Rowles Co., E. W. A.
Weber Costello Co.
- DEAFENING QUILT**
Cabot, Inc., Samuel
- DIPLOMAS**
Welch Mfg. Co., W. M.
- DISHWASHERS**
Colt's Patent Fire Arms Mfg. Co.
- DISINFECTANTS**
Palmer Company, The
Robertson Products Co., Theo. B.
- DOMESTIC SCIENCE EQUIPMENT**
Christiansen, C.
Kewanee Mfg. Company
Peterson & Co., Leonard
Pick & Co., Albert
Sheldon & Co., E. H.
Van Range Co., John
- DOOR CHECKS**
Norton Door Closer Co.
Sargent & Company
- DRAFTING ROOM FURNITURE**
Christiansen, C.
Economy Drawing Table & Mfg. Co.
Kewanee Mfg. Company
Sheldon & Co., E. H.
- DRAWING MATERIALS**
Devos & Reynolds
- DRINKING FOUNTAINS**
Murdock Mfg. & Supply Co., The
Nelson Mfg. Company, N. O.
Rundie-Spence Mfg. Company
Taylor Company, Halsey W.
Wolf Manufacturing Co.
- ELECTRICAL EQUIPMENT**
Adam Electric Co., Frank
American Wiremold Co.
- ELECTRIC WIRING**
Adam Electric Co., Frank
American Wiremold Co.
- ERASERS**
Palmer Company, The
Rowles Company, E. W. A.
Weber Costello Co.
- ERASER CLEANERS**
Lynn Company, James
National Wood Renovating Co.
Weber Costello Company
- FENCES**
Anchor Post Iron Works
Cyclone Fence Co.
Page Fence & Wire Prod. Assn.
- FIRE ESCAPES—SPIRAL**
Dow Company, The
Standard Conveyor Company
- FIRE EXIT LATCHES**
Sargent & Company
Smith Hardware Co., F. F.
Vonnegut Hardware Co.
- FIRE PROOF DOORS**
Dahlstrom Metallic Door Co.
- FIREPROOFING MATERIALS**
Asbestos Buildings Co.
- FLAGS**
Annin & Co.
- FLAG POLES**
Nelson Mfg. Co., N. O.
- FLOORING**
Maple Flooring Manufacturers' Assn.
Oak Flooring Adv. Bureau
- FLOORING—COMPOSITION**
Marbleoid Company
- FLOORING, MASTIC**
Moulding Brick Co., Thomas
- FOLDING PARTITIONS**
Wilson Corp., Jas. G.
- FURNITURE**
Acme Chair Company
American Seating Co.
Beckley-Cardy Co.
Cleveland Seating Co.
Columbia School Equipment Works
Columbia School Supply Company
Conrades Mfg. Company
Detroit School Equipment Co.
Economy Drawing Table & Mfg. Co.
Empire Seating Co.
Haywood Bros. & Wakefield Co.
Inner Braced Furniture Co.
Kunda Company, The Theodor
Louisville Chair & Furniture Co.
N. J. School Furniture Co.
Peabody School Furniture Co.
Progress Chair Company
Readboro Chair Company
Reed Rotary Adjustable Seat Co.
Rowles Co., E. W. A.
Scientific Seating, Inc.
Standard School Equipment Co.
- GAS MACHINES**
Matthews Gas Machine Co.
- GLOBES**
Nystrom & Co., A. J.
Weber Costello Co.
- GUARDS**
N. W. Expanded Metal Co.
- GYMNASIUM APPARATUS**
Chicago Gymnasium Equipment Co.
Medart Mfg. Co., Fred
Naragansett Machine Company
- HEATERS**
Hart Mfg. Company
Smith System Heating Co.
Virginia School Supply Company
- HEATING MATERIAL**
Crane Company
- HEATING SYSTEMS**
American Blower Company
Dunham Company, C. A.
Nelson Corporation, The Herman
Peerless Unit Vent. Co., Inc.
- HEATING AND VENTILATING APPARATUS**
Bayley Mfg. Company
Buckeye Blower Company
Nelson Corporation, The Herman
Peerless Unit Vent. Co., Inc.
- INK**
Commercial Paste Company
Rowles Co., E. W. A.
- INK WELLS**
Squires Inkwell Company
U. S. Inkwell Company
- JANITORS' SUPPLIES**
Masury-Young Company
Palmer Company, The
Pick & Co., Albert
Robertson Products Co., Theo. B.
Van Range Co., John
- KINDERGARTEN SUPPLIES**
Hammett Company, J. L.
- LABORATORY FURNITURE**
Kewanee Mfg. Company
Peterson & Co., Leonard
Sheldon & Co., E. H.
- LABORATORY SUPPLIES**
Durlon Co., Inc., The
Rowles Company, E. W. A.
- LANTERN SLIDES**
Keystone View Company
Victor Animatograph Co.
- LIBRARY FURNITURE**
Library Bureau
- LIBRARY SUPPLIES**
Library Bureau
- LIGHTING FIXTURES**
Holophane Glass Company
Ivanhoe-Regent Works
Plaut Company, L.
- LIQUID SOAP**
Robertson Products Co., Theo. B.
- LIQUID FLOOR HARDENER**
Sonnenborn Sons, L.
- LOCKERS**
Berger Mfg. Company
Durlabill Steel Locker Co.
Durand Steel Locker Co.
Federal Steel Fixture Co.
Lyon Metallic Mfg. Co.
Medart Mfg. Co., Fred
Naragansett Machine Company
- MANUAL TRAINING BENCHES**
Christiansen, C.
Columbia School Supply Co.
Sheldon & Co., E. H.
- LOCKS—KEYLESS**
Miller Keyless Lock Co., J. B.
- MAPS**
Nystrom & Company, A. J.
Rand, McNally & Company
Weber Costello Company
- MEMORIAL TABLETS**
Russell & Sons Co., Albert
Williams, Inc., John
- METAL LATH**
Berger Mfg. Company
N. W. Expanded Metal Company
- MICROSCOPES**
Bausch & Lomb Optical Co.
Spencer Lens Company
- MODELLING CLAY**
Hammett Company, J. L.
- MOTION PICTURE MACHINES**
DeVry Corporation, The
Victor Animatograph Co.
United Projector & Film Co.
- PAINTS**
Devos & Reynolds
Hockaday Company, The
- PANIC EXIT DEVICES**
Smith Hardware Co., F. F.
- PAPER**
Baker Paper Company
- PAPER TOWELS**
A. P. W. Paper Company
National Paper Products Co.
Palmer Company, The
Robertson Products Co., Theo. B.
- PARTITIONS—WIRE**
Cyclone Fence Co.
- PAPER TOWEL FIXTURES**
Palmer Company, The
- PASTE**
Commercial Paste Company
- PENCILS**
Dixon Crucible Co., Joseph
Earle Pencil Company
Faber, Eberhard
- PENCIL SHARPENERS**
Automatic Pencil Sharpener Co.
- PENS**
Spencerian Pen Company
- PIANOS**
Miesner Piano Company
Sieger & Sons Piano Mfg. Co.
- PLAYGROUND APPARATUS**
Chicago Gymnasium Equipment Company
Hill-Standard Company
Medart Mfg. Co., Fred
Naragansett Machine Company
Everwear Manufacturing Company
- PLUMBING FIXTURES**
Brunswick-Balke-Collender Co.
Clow & Sons, James B.
Crane Company
- Durlon Co., Inc., The**
Kelly & Bros., Thos.
Nelson Mfg. Company, N. O.
Rundie-Spence Mfg. Company
Speakman Co.
Vogel Company, Joseph A.
Wolf Manufacturing Co.
- PORTABLE SCHOOLHOUSES**
Armstrong Co., The
Asbestos Buildings Co.
Bossert & Sons, Louis.
Circle A Products Corporation
Maryland Metal Bldg. Co., Inc.
Mershon & Morley
Minter Homes Corporation
- PROJECTION LANTERNS**
Bausch & Lomb Optical Co.
Spencer Lens Co.
Victor Animatograph Co.
- REINFORCED STEEL**
Berger Mfg. Company
- ROLLING PARTITIONS**
Wilson Corp., Jas. G.
- SAVING SYSTEMS**
American Banking Machine Corp.
- SCALES**
Continental Scale Works
- SCENERY**
Twin City Scenic Co.
- SCIENTIFIC APPARATUS**
Rowles Company, E. W. A.
Scharf & Company
Welch Mfg. Co., W. M.
- SHADE CLOTHS**
Hartshorn Company, Stewart
- SHADE ROLLERS**
Hartshorn Company, Stewart
- SHOWERS**
Hoffmann & Billings Mfg. Co.
Speakman Co.
- SIGNAL SYSTEMS**
Holtzer-Cabot Electric Co.
- SPRING HINGES**
Lawson Manufacturing Co.
- STAGE SUPPLIES**
Lee Lash Studios
- STAIR TREADS**
Norton Company
- STATIONERS' TABLES**
Blair Company, J. C.
- STEEL LUMBER**
Central Steel Company, The
- STEEL SASHES**
Lupton's Sons Co., David
- STEEL STORAGE CABINETS**
Medart Mfg. Co., Fred
- STEEL WINDOWS**
Detroit Steel Products Co.
N. W. Expanded Metal Company
Truscon Steel Company
- Sweeping Compounds**
Robertson Products Co., Theo. B.
- TALKING MACHINES**
Victor Talking Machine Co.
- TELEPHONE SYSTEMS**
Federal Tel. & Tel. Co.
Holtzer-Cabot Electric Co.
- TEMPERATURE REGULATION**
Johnson Service Company
- THERMOMETERS**
Wildner-Pike Thermometer Company.
- TOILET PAPER**
A. P. W. Paper Company
Palmer Company, The
Robertson Products Co., Theo. B.
- TOILET PARTITIONS**
Sanymetal Products Co.
Structural Slate Company
Vitrolite Company
- TYPEWRITERS**
Underwood Typewriter Company
- VACUUM CLEANING SYSTEMS**
Spencer Turbine Company, The
- VACUUM PUMPS**
Nash Engineering Company
- VALVES—FITTINGS**
Crane Company
- VENTILATORS**
Globe Ventilator Company
- WAINSCOTING**
Vitrolite Company
- WARDROBES**
Evans, W. L.
Fairhurst Co., The J. T.
Wilson Corp., Jas. G.
- WASTE PAPER BASKETS**
National Vulcanized Fibre Company
N. W. Expanded Metal Company
- WATER COLORS**
American Crayon Co.
- WINDOWS—ADJUSTABLE**
Austral Window Co.
N. W. Expanded Metal Co.
Kawner Mfg. Company
Truscon Steel Company
- WINDOW SHADES**
Draper Shade Co., Luther O.
Maxwell & Co., S. A.
Shurlox Awning & Shade Company
Steele Mfg. Co., Oliver C.
- WIRE GUARDS**
Cyclone Fence Co.
- WINDOW GUARDS**
Badger Wire & Iron Works
Draper Shade Co., Luther O.
N. W. Expanded Metal Co.
- WOODWORKING MACHINERY**
American Woodworking Machinery Co.
Sheldon & Company, E. H.

REFERENCE INDEX

Acme Chair Company.....	25	Globe Book Co.....	145	Paddock Cork Co.....	140
Adam Electric Co., Frank.....	12	Globe Ventilator Co.....	110	Page Fence & Wire Prod. Assn.....	85
American Banking Machine Corp.....	95	Gregg Publishing Co.....	130	Palmer Co., A. N.....	144
American Blower Co.....	5	Hammett Company, J. L.....	142	Palmer Co., The.....	141
American Book Co.....	139	Hart Mfg. Co.....	20	Peabody School Furniture Co.....	19
American Crayon Co.....	27	Hartshorn Co., Stewart.....	121	Peckham, Little & Co.....	31
American Wiremold Co.....	17	Heath Co., D. C.....	129	Peerless Unit Vent. Co.....	106
American Woodworking Machine Co.....	144	Heywood-Wakefield Co.....	22	Pa. Structural Slate Co.....	70
Anchor Post Iron Works.....	97	Hill-Standard Co.....	151	Peterson & Co., Leonard.....	122
Annin & Co.....	145	Hockaday Company, The.....	92	Pick & Co., Albert.....	101
Armstrong Co., The.....	144	Hoffman & Billings Mfg. Co.....	114	Pittman & Sons, Isaac.....	133
Austral Window Co.....	4th Cover	Holden Patent Book Cover Co.....	77	Plaut Company, L.....	100
Automatic Pencil Sharpener Co.....	137	Holophane Glass Co.....	3	Premier Engr. Co.....	145
Badger Wire and Iron Works.....	142	Holtzer-Cabot Electric Co.....	98	Progress Chair Co.....	20
Baker Paper Co.....	139	Inner Braced Furniture Co.....	18	Rand, McNally & Co.....	130
Bausch and Lomb Optical Co.....	126	International Text Book Co.....	130	Readboro Chair Co.....	26
Bayley Mfg. Co.....	114	International Time Recording Co.....	130	Reed Rotary Adjustable Seat Co.....	26
Beckley-Cardy Co.....	18	Iroquois Publishing Co.....	131 and 133	Roberts & Meck.....	144
Berger Mfg. Co.....	106	Johnson Service Co.....	109	Robertson Prod. Co., Theo. B.....	142
Binney & Smith Co.....	136	Kawner Mfg. Co.....	2	Rowles Co., E. W. A.....	29 and 133
Blair Company, J. C.....	139	Keenan Struct. Slate Co., Inc.....	70	Rundie-Spence Mfg. Co.....	110
Bossert & Sons, Louis.....	144	Kelly & Bros., Thos.....	110	Russell & Sons Co., Albert.....	146
Brunswick, Balke Collender Co.....	80	Kewanee Boiler Co.....	10	Sani Products Co.....	103
Buckeye Blower Co.....	11	Kewanee Mfg. Co.....	24	Sanymetal Products Co.....	90
Cabot, Inc., Samuel.....	74	Keystone View Co.....	126	Sargent & Co.....	82
Central Steel Co., The.....	118	Kunda Co., The Theodor.....	21	Scharf & Co.....	134
Chicago Gymnasium Equip. Co.....	118	Laidlaw Brothers.....	122	Scientific Seating, Inc.....	26
Christiansen, C.....	141	Landis Eng. & Mfg. Co.....	122	Sheldon & Co., E. H.....	134
Circle A Products Corp.....	118	Leavitt Mfg. Co.....	178	Shurlox Awning & Shade Co.....	146
Cleveland Seating Co.....	23	Library Bureau.....	73	Smith Hardware Co., F. F.....	119
Clow & Sons, James B.....	105	Lippincott Co., J. B.....	129	Sonnenborn Sons, L.....	13
Coe Manufacturing Co.....	145	Longmans Green & Co.....	132	Speakman Co.....	111
Columbia School Equip. Works.....	24	Louisville Chair & Furniture Co.....	20	Spencerian Pen Co.....	137
Columbia School Supply Co.....	28	Luptons Sons Co., David.....	98	Spencer Lens Co.....	126
Commercial Paste Co.....	140	Lynn Company, James.....	28	Spencer Turbine Co.....	6
Conrades Mfg. Co.....	22	Lyon Metallic Mfg. Co.....	96	Standard Blackboard Co.....	144
Continental Scale Works.....	120	Marbleoid Co.....	3rd Cover	Standard Conveyor Co.....	12
Crane Company.....	113	Maryland Metal Building Co.....	8	Standard Electric Time Co., The.....	32
Cyclone Fence Co.....	75	Masury-Young Co.....	142	Standard School Equip. Co.....	20
Dahlstrom Metallic Door Co.....	83	Maxwell & Co., S. A.....	125	Steele Mfg. Co., Oliver C.....	146
Detroit School Equipment Co.....	26	Medart Mfg. Co., Fred.....	94 and 99	Steger & Sons Piano Mfg. Co.....	121
Detroit Steel Products Co.....	89	Mershon & Morley Co.....	122	Structural Slate Co.....	74
DeVry Corporation, The.....	125	Miesner Piano Co.....	79	Taylor Co., Halsey W.....	4
Dixon Crucible Co., Jos.....	137	Miller Keyless Lock Co., The J. B.....	31	Templin-Crockett-Bradley Co., The.....	145
Dow Company, The.....	82	Minter Homes Corp.....	86	Thomas Clock Co., Seth.....	148
Draper Shade Co., Luther O.....	93	Moulding Brick Co., Thos.....	102	Time Systems Co., The.....	124
Dudfield Mfg. Company.....	134	Murdock Mfg. & Supply Co., The.....	102	Truscon Steel Co.....	91
Dunham Company, C. A.....	108	Naragansett Machine Co.....	81	Twin City Scenic Co.....	125
Durabill Steel Locker Co.....	117	Nash Engineering Co.....	30	Underwood Typewriter Co.....	121
Durand Steel Locker Co.....	107	Natl. Bldg. Granite Quarries Assn.....	88	United Projector & Film Co.....	126
Durlon Co., Inc., The.....	116	National Crayon Co.....	134	U. S. Inkwell Co.....	140
Eagle Pencil Co.....	137	National Paper Products Co.....	76	Van Range Co., John.....	144
Economy Drawing Table & Mfg. Co.....	127	National Terra Cotta Society.....	71	Victor Animatograph Co.....	69
Educational Bindery Co.....	130	National Vulcanized Fibre Co.....	139	Victor Talking Machine Co.....	146
Empire Seating Co.....	72 and 73	Nelson Corp., The Herman.....	1	Virginia School Supply Co.....	102
Evans, W. L.....	118	Nelson Mfg. Co., N. O.....	31 and 114	Vitrolite Co.....	102
Everwear Mfg. Co.....	84	Newson & Co.....	128	Vogel Company, Joseph A.....	2nd Cover
Faber Co., Eberhard.....	136	N. Y. Silicate Book Slate Co.....	146	Vonnegut Hardware Co.....	152
Federal Steel Fixture Co.....	31	N. W. Expanded Metal Co.....	135	Weber Costello Co.....	16
Federal Tel. & Tel. Co.....	122	Norton Co.....	98	Wels Mfg. Co., Henry.....	115
Foots Foundry Co., J. B.....	143	Norton Door Closer Co.....	144	Wildner-Pike Thermometer Co.....	106
Gills & Geoghegan, The.....	117	Nystrom & Co., A. J.....	132	Wolf Mfg. Co.....	10
		Oak Flooring Adv. Bureau.....	86	World Book Co.....	181

If any articles or textbooks cannot be found listed, write our Subscribers' Free Service Department, care of American School Board Journal, Milwaukee, Wis.

AFTER THE MEETING



College Life In Colonial Times.

College students of today and certainly the fathers who have college expenses to pay will be interested in this expense account of a young colonial student, as reproduced in the *Youths' Companion*. The young man was born near Waltham, Massachusetts, in May, 1732. In the year 1751 his father decided that his son should go to the college at Newark, New Jersey. That he might be favorably received there among strangers the young man was furnished with letters of commendation from clergymen and from honorable magistrates. Here is an extract from one of those important letters:

"Mr. — visits Newark college in order to qualify himself for ye work of ye ministry and to obtain academical honors from that college, which I doubt not his piety and learning will soon merit."

The young man made out a list of things needful for his journey; among them were butter at eight and one-third cents a pound and tea at four dollars a pound. Stopping at Newport, he supplied himself with a penknife, a corkscrew and a buckle brush. After he had spent eighteen and three-fourths cents in New York he hurried on to Newark. Among the new clothing that seemed essential was a cocked hat of imperishable felt with an embroidered silk button upon the front of it.

After twelve months at college the young student bought a horse upon which to ride home; he had sent his baggage by sea. He was on the road for four days, and though he stopped to rest each night his notebook shows an expense account of less than five dollars for the trip. Here are his college bills for the whole year:

Clothing	\$ 43.00
College bills, board at 80% cents a week	42.00
Amusements	6.00
College bills proper	20.00
Rum	3.00
Cider	8.00
Traveling expenses	12.00
Fuel, hickory wood at \$1.62 a cord, candles, barber and other sundries	11.00
	\$145.00

How many young men nowadays spend as little as that for twelve months at college?

The Error He Found

Mr. Schmitt was a recent appointee to the school board and a member of the textbook committee. His active interest led an enthusiastic bookman to call on him and leave a newly published ancient history for his perusal.

"Well," said Schmitt when the bookman came to see him a few weeks later, "you got a nerve to ask us to put that book in our high school. Why you make all those fellows die before they were born."

"How so?" asked the bookman?

"Why look here," said Schmitt triumphantly, "It says here that Nabuchadnezzar was born in 604 and died in 561 B. C."

The Old Ones Are Best.

The teacher had told her pupils to write a short essay about Lincoln, and one boy handed in the following:

"Abraham Lincoln was born on a bright summer day, the twelfth of February, 1809. He was born in a log cabin he had helped his father to build."

His Prize Lamp.

Father (reading a letter from his son at college to mother)—"Myopia says he's got a beautiful lamp from boxing."

Mother—"I just knew he'd win something in his athletics."

By Absorption—Maybe.

Teacher (to pupil): "How much time did you spend on your history last night?"

Pupil: "All night."

Teacher: "How is that?"

Pupil: "I slept on it."

THE PICTURE.

Prances Wright Turner.

There's a strange picture hanging on grandmother's wall
Of grandma at ten years old;
Her skirts are spread out, with frills all about,
And many a tuck and a fold.

Her sprigged frock is short and her pantalettes long,
And her hair done in curl after curl;
She is sweeter by far than her grandchildren are—
This quaint, little long-ago girl.

In the little stone schoolhouse beyond the birch wood,
She learned in the days long ago.
Those small, slippered feet down the shady old street,
Every day, trudged to school to and fro.

The teacher, she told me, was always a man—
In those days they called him the "master"
And he taught 'rithmetic with a slender, birch stick
Which made them, she says, learn the faster.

In the winter they had a big stove in the room,
Which burned great wood logs to keep warm.
And grandma says that the seat where she sat
Was called, not a "desk," but a "form."

And when they recited, they stood on the floor
With their toes on a line, for the spelling;
If they missed, they must go just one place below,
When they'd get to the head was no telling.

But when they once got to the top of the line,
They had little cards they called "merits"
"Mercy me!" Grandma said, "To stay at the head
We'd dig at our lessons like ferrets."

When I look at the picture on grandmother's wall,
With it's many a frill and a curl,
It seems, Oh! SO queer, that grandmother here
Is the very SAME, old-fashioned girl.

At Least a Chance.

A small boy in a Chicago school refused to take part in a sewing lesson on the ground that it was beneath his dignity.

"George Washington sewed," said the teacher, taking it for granted that every soldier has to do it at times. "You don't consider yourself better than Washington, do you?"

"I don't know; time will tell," replied the boy.

Teacher (in physiology class).—How many sets of teeth do we have?

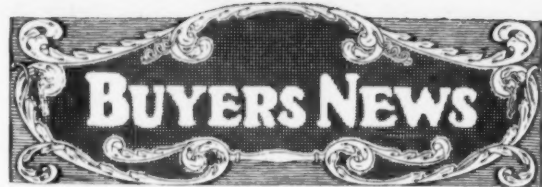
Bright Pupil—Three; temporary, permanent and false.

Teacher: Where were you born?

Little Girl: I wasn't born at all, I have a stepmother.—Life.



THE SCHOOL BUS.—(N. Y. Globe).



GENERAL NEWS NOTES.

Move Offices. The New York offices of Silver, Burdett & Company, publishers have been removed to 41 Union Square, West. The offices are in charge of Mr. A. L. Hart, representative of the firm.

Help for Graduation Week. The Harter School Supply Company has just completed three valuable catalogs for the use of high school principals and teachers in charge of graduating classes. The first catalog is known as the "Graduates' Guide" and suggests a list of books containing commencement plays, graduation entertainments, dialogs, song numbers, orations and essays and miscellaneous graduating materials.

The second catalog includes a list of illustrated mottoes. Copies of both catalogs will be sent on request to the Harter School Supply Co., Cleveland, Ohio.

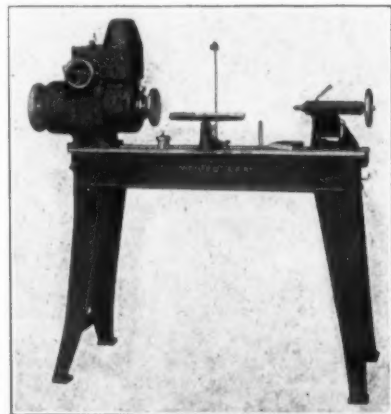
Fibre Manufacturers Consolidate. The American Vulcanized Fibre Company of Wilmington, Del., manufacturers of Vulcot Waste Baskets, have consolidated with the National Fibre & Insulation Company and the Keystone Fibre Company of Yorklyn, Del. The consolidated concern is known as the National Vulcanized Fibre Company. The manufacturing resources include factories at Wilmington, Yorklyn, and Newark, Delaware. The central offices are located at Wilmington.

The Control of Stage and Auditorium Lighting. A most valuable bulletin on theater lighting has been issued recently by the Frank Adam Electric Co., St. Louis, Mo. It describes in detail the principles and the devices of the Major System of pre-selective, remote control of lighting in theaters and auditoriums where the greatest efficiency combined with the highest degree of safety and permanence are essential. The Major System has been selected by the most important school architects as a standard and is in use in such important buildings as the Cass Technical High School, Detroit, Central High School, Bay City, Mich., the Senn High School, Chicago, the North East High School, Minneapolis, etc. The present bulletin is elaborately illustrated with technical details of the system and will be found of interest to architects and members of building committees who are in charge of specifying school auditorium lighting.

NEW TRADE PRODUCTS.

Oliver Adjustable Speed Lathe. Speed Lathes were the first wood working machines to be motorized, and the Oliver motor head speed lathe, marketed by the Oliver Machinery Company, at Grand Rapids, Mich., was the first of the direct current type to be produced. The old speed lathes, while not as refined as those now built have done excellent work and stood the test of time.

The Oliver Company has announced the marketing of the new Oliver No. 51 adjustable speed motor head lathe for alternating current. The new lathe is a distinct step forward in the development of better and direct motorized wood working machinery.



OLIVER ADJUSTABLE SPEED LATHE.

The lathe has met with remarkable success in its introduction into the school shops and the firm claims thousands of users among educational institutions where classes in woodworking are conducted.

THE FUN LINE PLAYGROUND EQUIPMENT



“Every Schoolground a Playground—”

***93000 children killed and injured
Within a year in the streets of our cities-!***

Mr. School Man is not the great need for more playgrounds a thing worthy of your consideration?

Should you rely on Park boards or Civic organizations to establish and maintain safe places for the children to play?

This company will gladly assist any school official with his playground problems.

Let us send one of our beautiful catalogs.

Largest manufacturers of Playground equipment.

Booths 64-65
N. E. A. Convention
Cleveland
Feb. 26 - Mar. 1st

HILL-STANDARD Co.
ANDERSON, INDIANA

Our
21st year

Von Duprin

Self-Releasing Fire Exit Latches

For Universal Service

It is our firm belief that Von Duprin latches will eventually be used on nearly all buildings in which considerable numbers of people live or work or play.

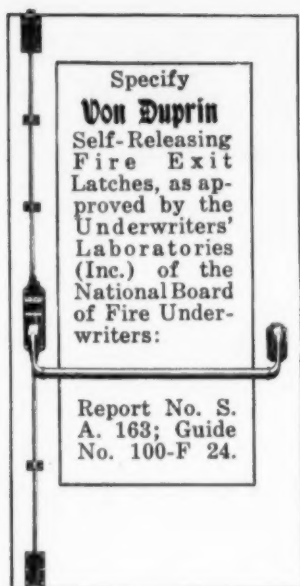
Because of past experiences with fires and panics in school houses and theaters, Von Duprins have become standard equipment on these buildings in many cities.

Yet the losses in buildings of other types, while they have been less spectacular, have been almost as serious, and the need for using Von Duprins is actually as great.

On the doors of apartment houses, hospitals, factories, mills, hotels and churches, Von Duprin latches are protecting the inmates, and making exit easy in daily use.

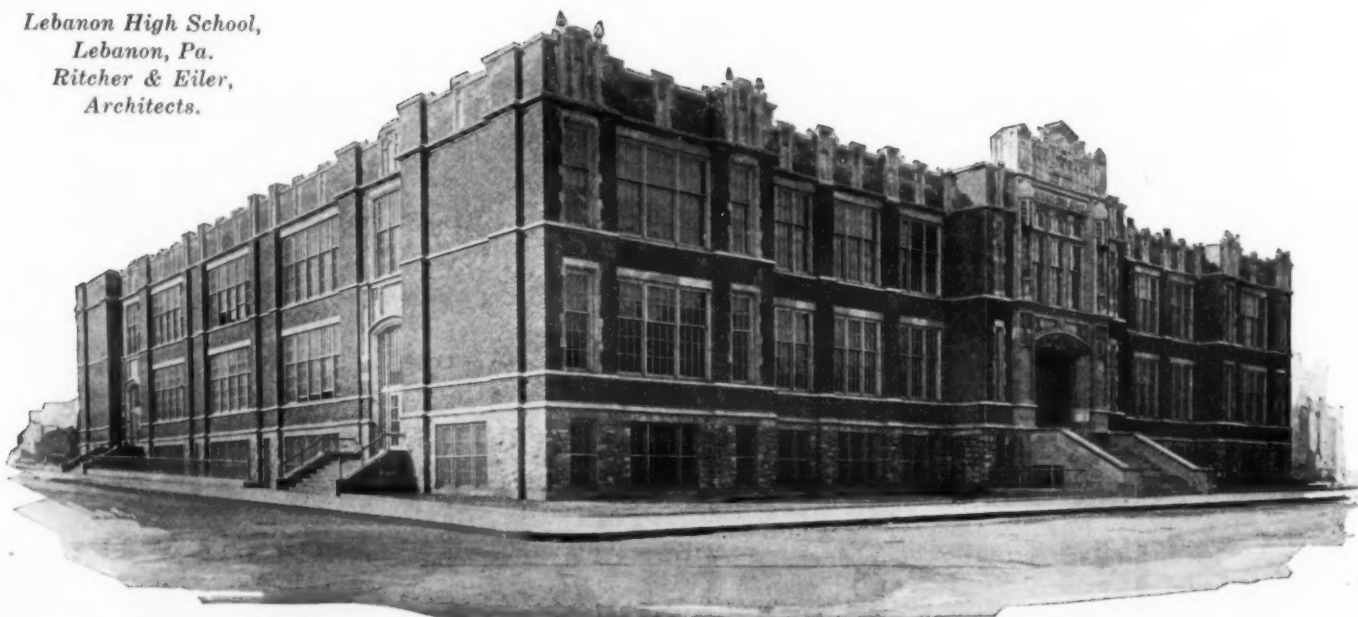
In time the public will keenly realize the need for their use on such buildings, and will demand them. In the meantime the architectural profession, having sensed the need, is doing an excellent work in urging building owners to give the inmates of their buildings the protection afforded by Von Duprin latches.

Ask us for Catalog 12-C, or see "Sweet's," pages 1323-1327.



VONNEGUT HARDWARE CO.
Indianapolis, Ind.

*Lebanon High School,
Lebanon, Pa.
Ritcher & Eiler,
Architects.*





Cafeteria of Utica County Day School, Utica, New York, Pember & Campaigne, Architects, Albany, New York, being one of four school installations for this firm.

A Floor for Every Room and Corridor

In every room and corridor of the modernly designed and equipped Utica County Day School is a Marbleloid *permanent* Floor. These floors are fireproof, quiet, warm, sanitary, attractive and easy to walk on. They are quickly cleaned and do not require painting, varnishing or expensive upkeep.

Marbleloid is a very durable flooring material. It should not be confused, however, with stone, concrete or other hard floors. Instead it is a resilient, tough, elastic composition, manufactured and installed by the Marbleloid Company.

The installation of Marbleloid Floors is not confined solely to new school buildings. There

are many instances where unsatisfactory floors in old buildings have been re-surfaced with Marbleloid, vastly improving the interior attractiveness and comfort of the rooms as well as releasing the community from floor installation and expense for many, many years to come. Marbleloid can be installed over wood, concrete or cement floors; also over steel foundation.

Marbleloid Flooring is worthy of investigation by every school architect, board and superintendent. Every floor is guaranteed by the Marbleloid Company. *Samples, School Folder and List of School Information will be sent on request.*

THE MARBLELOID COMPANY 465 Eighth Ave., New York

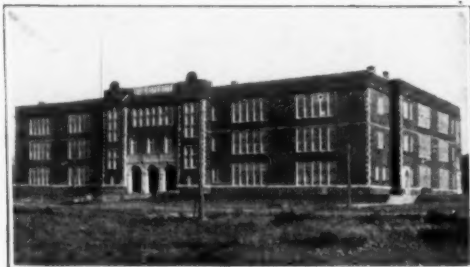
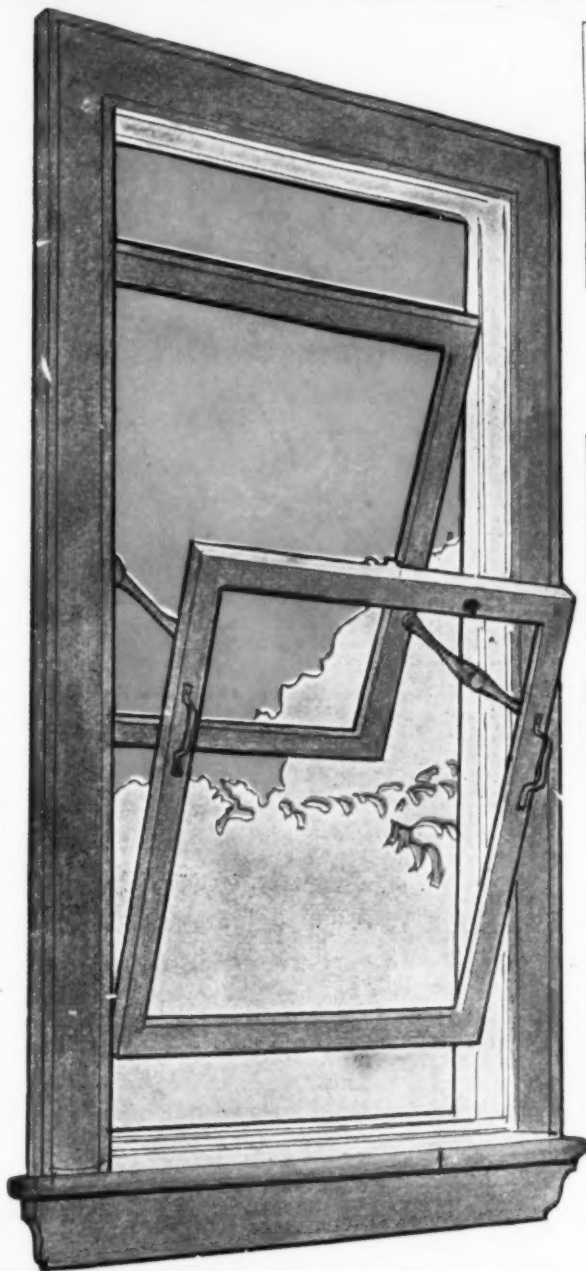
MARBLELOID

*The Universal FLOORING
for Modern Buildings*

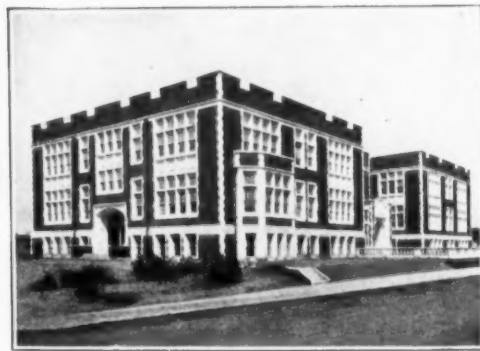
A
U
S
T
R
A
L
I
Z
E

PERFECT VENTILATION WITHOUT DRAFT

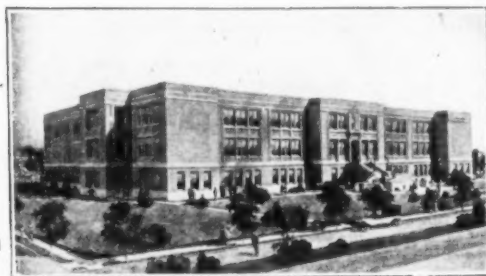
Y
O
U
R
S
C
H
O
O
L



*Lincoln High School, Erie, Pa.
W. B. Ittner, Archt.*



*Park View School, Washington, D. C.
Snowden Ashford, Archt.*



*High School, Wilmington, N. C.
W. J. Wilkins & Co., Archts.*

THE "AUSTRALIZING" of your new school means not only a saving on the initial installation, but it represents a permanent investment in LIGHT and AIR with HEALTH and EFFICIENCY reflected in the Classroom.

AUSTRAL WINDOWS in wood, steel and hollow metal construction, are specified by leading architects throughout the country for buildings where ventilation and control of light are important. Of importance are ventilation and control of light in schools, therefore AUSTRAL WINDOWS justify serious consideration of School Superintendents and Building Committees for new schools.

A small cardboard model demonstrating the advantages of the AUSTRAL WINDOW will be mailed upon request.

THE AUSTRAL WINDOW CO.

101 Park Avenue.

New York City.